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ABSTRACT

This document considers both self-examination and external evaluation of gifted and talented education programs. Principles of the self-examination process are offered, noting similarities to external evaluation models. Principles of self-evaluation efforts include the importance of maintaining a nonjudgmental orientation, soliciting views from the insider's perspective, and triangulating data. The most important techniques in self-evaluation are observation, interviewing, and participation. While self-evaluation maintains an educational program's quality on a daily basis, expert external evaluation is essential to an in-depth and objective understanding. Important considerations in external evaluation include working with an external evaluator and understanding qualitative and quantitative approaches. Clear communication of evaluation findings is important for both internal and external evaluations. General evaluation guidelines and specific guidelines for evaluating gifted and talented education programs are given. A case study illustrates many of these guidelines, including the importance of context; preparing a program description; the use of verbatim quotations; assessment and analysis; review of the standard program mechanisms (referral, identification, and selection); refinements; analyzing underlying factors; addressing larger sociopolitical concerns; and communicating evaluation findings. Appendices provide further explanation of evaluation components. (Contains 42 references.) (DB)

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Evaluate Yourself

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THE NATIONAL RESEARCH CENTER ON THE GIFTED AND TALENTED

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Evaluate Yourself

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ABSTRACT

The health of a gifted and talented program requires both self-examination and external evaluation. Routine self-examination allows early detection of educational problems and confirmation of a sound programmatic approach. By detecting and thus helping to prevent program deterioration, self-examination—together with its corollary, external evaluation—promotes the intellectual and artistic health of gifted and talented education programs. This discussion will highlight some of the common sense ways of reflecting upon one's programmatic achievements and shortcomings, and discuss briefly the value of an external evaluation component in that reflective process.

Self-examination

Many of the concepts and techniques of self-evaluation derive from traditional external evaluation. Useful concepts include maintaining a nonjudgmental orientation, soliciting views from the insider's perspective, and triangulating data. The most important techniques include observation, interviews, and participation.

External Evaluation

Self-examinations and external evaluations, in addition to sharing concepts and techniques, can complement each other and help to cross validate data from each approach. Self-evaluations help maintain an educational program's health on a daily basis; expert external evaluation is essential to an in-depth and objective understanding. External evaluators offer training and experience and an "objective eye" rarely found inside a program. They can help identify goals and objectives at the onset of a program and can help participants take stock of an ongoing program. They can help establish standards, benchmarks, and milestones with which to measure student, teacher, administrator, and program performance against multiple goals. External evaluators can also provide feedback about progress toward those goals and inform policy decision makers about the impact of a program in a credible fashion. External evaluation plays an invaluable role in refining healthy programs and has a significant impact on future funding and programmatic concerns.

Concluding Thoughts

Evaluation is essential to learn how a gifted program works, how effective programs are, and how to raise their standards of quality. Self-evaluations should be a routine part of daily program activity. Students, teachers, administrators, and parents should be encouraged to conduct informal self-appraisals on a daily or at least weekly basis, questioning and comparing what students are doing in relation to stated program goals and objectives. Systems should be developed to give regular feedback to students,

teachers, administrators, and parents, including parent-teacher conferences, faculty meetings, and student performance conferences.

External and independent evaluations complement self-evaluations by ensuring a more objective and credible appraisal. Formative evaluations provide a continual flow of information to program officials throughout a review to improve program practice. Summative evaluations can enhance formative evaluations by providing additional knowledge with a focus on policy decision making. External evaluations, whether qualitative or quantitative, formative or summative can improve program practice and student performance. Independent evaluations also help to establish the utility of such approaches in gifted education as acceleration, enrichment, and special group settings. They are also more credible to sponsors and outside agencies, particularly concerning sensitive or controversial issues.

Nearly all programs can be improved by a critical review. At risk in an unexamined program are no less than the health and well-being of gifted and talented children and the future of the nation. Together, these approaches play an essential part in the development, maintenance, and understanding of educational programs for the gifted and talented.

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EXECUTIVE SUMMARY

The health of a gifted and talented program requires both self-examination and external evaluation. Routine self-examination allows early detection of educational problems and confirmation of a sound programmatic approach. By detecting and thus helping to prevent program deterioration, self-examination—together with its corollary, external evaluation—promotes the intellectual and artistic health of gifted and talented education programs. This discussion will highlight some of the common sense ways of reflecting upon one's programmatic achievements and shortcomings, and discuss briefly the value of an external evaluation component in that reflective process.

This presentation is designed for multiple audiences. It provides a general direction for administrators, encouraging them to conduct self-evaluations and providing some guidelines for selecting an outside evaluation expert to assist in the evaluation process. It also serves as an orientation for gifted and talented staff members who play a role in conducting self-evaluations. Finally, it aims to sensitize trained evaluators new to the field of gifted and talented program evaluation to some of the field's nuances.

This presentation is an overview about evaluation, not a simple how-to instruction booklet. Although I am a major proponent of individuals taking evaluation into their own hands and conducting self-evaluations, I do not consider one brief discussion sufficient preparation for a critical program review. This discussion is a first step, a primer, which should be supplemented with reports, texts, classroom instruction, and apprenticeship experiences if possible. A variety of recommended texts on evaluation are mentioned throughout this presentation. Gifted and talented practitioners new to evaluation should seek the assistance of an evaluator to act as coach, assisting in the design and execution of an evaluation.

Self-examination[1]

Many of the concepts and techniques of self-evaluation derive from traditional external evaluation. Self-evaluations follow the same general model that external evaluators use. A typical model of program assessment involves:

1. Determining goals and outcomes
2. Describing the processes required to accomplish goals and objectives
3. Determining the immediate, direct, short-term effects of the program (comparing evidence of outcomes)
4. Determining the long-term effects of the program

In addition, evaluation provides useful concepts to guide a self-examination, including maintaining a nonjudgmental orientation, soliciting views from the insider's perspective, and triangulating data. The most important techniques include observation, interviewing, and participation.

Nonjudgmental Orientation

A nonjudgmental orientation requires the evaluator to suspend value judgments about a given behavior or practice. It is similar to our habit of suspending our disbelief while watching a play or a movie: We allow the author a certain latitude and the time to unravel the whole story before judging the credibility of the work. A nonjudgmental orientation allows the educational evaluator to describe an observed behavior or situation in detail—however bizarre or obvious it appears at first glance—before completing an analysis of classroom behavior in context. Recommending a nonjudgmental orientation in an evaluation may sound contradictory, but such a stance is essential in allowing the evaluator to collect a full range of data before screening certain areas out of consideration. This orientation is particularly important in an evaluation of gifted programs in which novel, creative, and periodically "strange" teaching approaches are adopted. For example, a judgmental evaluator watching a classroom of dancing students might conclude that the class was involved simply in a dance exercise and thus decide that gifted and talented programs are characterized by play rather than content. A nonjudgmental evaluator would conduct additional observation and/or interviews that could reveal that the class was an eighth-grade physics course engaged in an exciting and appropriate approach to demonstrating how long and short light waves operate. A judgmental orientation may lead to premature and in many cases inappropriate assessments of a specific approach or behavior before there are enough data with which to interpret it meaningfully or place it in context.

Insider's Perspective

A sound self-examination is grounded in the participants' views of what they are doing, what they are trying to accomplish, and what they think they have accomplished. Every educational evaluation should attempt to solicit the views of administrators, teachers, students, and parents. Even longtime participants in a program can be surprised and enlightened by other participants' views on the situation. And when the evaluator's own views are confirmed by interviews with others, the evaluator has strengthened the assessment by grounding knowledge in data from others living in and with the situation day to day.

Students, teachers, and administrators may have radically different world views or ways of looking at the same educational practices. These different perspectives are a natural function of differing roles, values, status, and power. However, when perspectives appear irreconcilably different, the parties involved are most likely not operating with a system of shared values. Identifying this type of problem, which is often at the heart of poorly conceived programs, can explain much of the miscommunication observed in a program. Thus, describing a program (including processes and outcomes) and the most salient behaviors (including identification practices, teaching, and learning) can help in making a determination about whether the practices or behaviors are adaptive or maladaptive for students, teachers, administrators, and parents—and why. When interviews and observations are grounded in the insiders' views of how a program works, findings are considered more salient and recommendations more realistic and practical. In addition, the evaluation can identify and contrast multiple program goals with actual performance.

Triangulation

Triangulation is another invaluable concept that any program participant can use to guide an effective self-evaluation. Triangulation is used to analyze data. It involves testing one source of information against another to strip away alternative explanations. For example, an evaluator might think that a gifted and talented program was primarily a Humanities-literature oriented program because students were observed discussing literature, reciting lines from plays, and critiquing each other's literary reports during most of the week. However, a review of the program calendar might indicate that this flurry of activity was merely the culmination of the Humanities portion of a much broader program. Similarly, a student might say that he is getting straight As. Comparing these statements with program records and teacher evaluations not only establishes the student's credibility, but more importantly, reveals participants' (often differing) perspectives about the program. For example, the evaluator might find corroborating evidence that the student is receiving straight As, but might also learn that the grades have gone to the student's head, according to a peer. Teachers may indicate that although the student is doing very well, in fact no grades are given in the program. In interviews, other students may confirm this official policy and then explain how they are informally ranked according to ability throughout the program. Thus triangulation may help confirm or disprove information and can force the evaluator to probe further to reveal another level of information. In both cases, the evaluator learns something about the program's effectiveness and about how well it matches its stated philosophy in practice.

Observation

There is no adequate substitute for direct, daily observation in evaluation. In a self-evaluation, teachers can observe students systematically—for example, observing whether different cultural groups interact, whether shy students become more outgoing, when a lesson plan is engaging, or whether an administrator participates in teaching or social activities associated with the program. Over time, patterns of behavior will become evident. These patterns, documented repeatedly over time, are a form of reliability. Observations can be used to establish baseline descriptions about the program, teacher and student performance, administrative support, and many other program-related features. Similarly, observations can be recorded to document change (and possibly growth) over time. Observations can be filed in a student portfolio to document student performance throughout the year, noting, for example, increasing sophistication in research projects, mastery of artistic expression, or complexity of mathematical problem solving. Observation is a natural tool; it is enhanced when guided by the concepts described above.

Interviews

Often the best way to check on or triangulate observation is simply to ask the observed participants what they were doing. A student singing in chorus may seem to enjoy herself. An interview with that student may reveal, however, that she hates chorus and is participating in it only because her parents insisted. Interviews should be open ended—that is, they should allow the person being interviewed to answer in as full and complete a manner as he or she deems appropriate. Closed yes-or-no questions are quick and efficient, but they are usually biased by the person conducting the interview and tend to shape the response. Closed questions are useful after initial interviews and observations suggest what the relevant questions are—starting from the insider's perspective.

Participation

In any educational evaluation, the most credible interviews and observations are conducted by evaluators who spend time with program participants. In this sense, evaluators who are also participants, who share in the daily lives of students, teachers, administrators, and parents, have a much more comprehensive picture of how a gifted and talented program operates than the evaluator who simply comes in once in a year, asks a few questions, observes a few classes, and then writes a report about the program. There is no substitute for the depth of understanding gained from routine participation in classroom activity, extracurricular activity, home activity, faculty meetings, and school board meetings. Direct participation exposes the evaluator to the multiple levels and goals of program participants and affiliates. It also enhances the validity of the evaluation findings.

It is clear from this brief discussion that program participants can—and in many cases do—apply evaluation concepts and techniques in their daily lives in gifted and talented programs. Observation, measurement, documentation, and evaluation are all normal activities of teachers, students, parents, and administrators. Combining these concepts and techniques simply helps to make these activities more systematic and improves the validity and reliability of the self-evaluation.

External Evaluation

Self-examinations and external evaluations, in addition to sharing concepts and techniques, can complement each other and help to cross validate data from each approach. Self-evaluations help maintain an educational program's health on a daily basis; expert external evaluation is essential to an in-depth and objective understanding. External evaluators offer training and experience and an "objective eye" rarely found inside a program. They can help identify goals and objectives at the onset of a program and can help participants take stock of an ongoing program. They can help establish standards, benchmarks, and milestones with which to measure student, teacher, administrator, and program performance against multiple goals. External evaluators can also provide feedback about progress toward those goals and inform policy decision makers about the impact of a program in a credible fashion. External evaluation plays an invaluable role in refining healthy programs and has a significant impact on future funding and programmatic concerns.

Working With an External Evaluator

An external evaluator should be chosen as carefully as a personal physician—the life of the program may depend on that choice. Choosing a suitable evaluator can also help eliminate future problems. For example, a gifted and talented program should be developed with the assistance of an evaluator, but it should not be developed to meet the evaluator's needs. Such an approach can skew the program toward easily quantifiable elements instead of goals which are more difficult to measure, such as higher order thinking goals. Selecting an evaluator who is familiar with gifted and talented programs will minimize that kind of problem. Screening and selecting the right evaluator is only half the job, however. Participants must also communicate openly with the evaluator throughout the evaluation process—even the most talented investigator needs the help of participants.

In addition, participants need to recognize that the external evaluator must be an independent observer. Independence is essential not only to ensure honest and reasonably objective feedback about the condition of the program, but to satisfy external agencies of the reliability and validity of the evaluator's finding. Sponsors typically demand an external evaluation to determine whether taxpayer money is being spent prudently and whether the program is educationally on track.

Finally, participants need to listen carefully to the external evaluator's assessment. This does not mean that a program should blindly follow any and all recommendations. However, ignoring sound—even if unpleasant—advice can have serious consequences. Unchecked, administrative and curricular problems can become deeply ingrained in the body of the program, compounding the difficulties year after year. External evaluations are more expensive than self-evaluations, but like an annual physical, they are worth the time and investment.

Qualitative and Quantitative Approaches

External evaluations, like self-evaluations, should combine qualitative and quantitative approaches. Qualitative approaches are used to describe a program, its operation, and its effects. They are also required to establish the appropriate baseline or context within which to interpret student performance. An accurate measure of student performance requires preentry information about student, program, and community characteristics, including cultural, social, political, and economic factors. For example, it is important to document whether the evaluation focuses on a program that is just starting up or is a mature program operating for years. In addition, an accurate measure of how far a student has traveled requires qualitative and quantitative baseline data about the student's previous attendance patterns, grades, reading level, achievement record, and so on. Such data can also indicate whether a student is underachieving. In addition, qualitative approaches (such as ethnography, an established qualitative approach in evaluation) describe program implementation in sufficient detail to explicate the multiple goals of a program; delineate the process in which students, teachers, administrators, and parents interact (in school and at home); and highlight adaptive and maladaptive social arrangements.

A description of the program can determine whether or not student identification techniques and program approaches match. In addition, a description of the process of how students and teachers function enables program and policy officials to make program modifications that can enhance student outcomes. Gifted and talented programs are particularly amenable to the use of qualitative approaches, in that creative approaches to teaching can be described and documented with minimal obtrusiveness.

Qualitative information can also be used to document program effects. The data are readily available in gifted programs and can contribute to a more objective and useful evaluation. For example, in an arts-oriented gifted program a portfolio of the student's accomplishments or products can be rated from beginner to professional quality. This would produce useful entry, mid-course, and end-of-year program data. In addition to documenting outcomes over time, the same data can be compared to program description data to draw causal inferences about specific elements of the program, such as teacher dedication, and specific outcomes, such as student participation in mathematical competitions. Similarly, teams can be assembled to rate academic portfolios throughout the year—focusing on pre-established criteria, including mastery in linguistic and scientific domains.

Converting qualitative data about program variables into a quantitative format can facilitate comparison and analysis of program effects. For example, student participation in the program could be translated or converted into zero to five days a week, concerning gender—males could be coded as one and females as two in a binary fashion, time of day—morning coded one and afternoon two, topic—English coded one and mathematics two, and specific instructional approach—lecture coded one and team teaching two. This simple qualitative/quantitative conversion would facilitate analysis of the qualitative data, enabling the evaluator to determine the effects of a program including differential effects on different students. This example alone would provide an insight into general program outcomes, as well as effects of different amounts or types of instruction, student gender, and time of day. It would also describe how these variables interacted. Using qualitative data to describe program effects is one of the most promising (and needed) approaches to developing more meaningful evaluations of gifted and talented programs.

Quantitative measures document outcomes, including student achievement over time. Standardized tests have been considered the "coin of the realm" for many years in evaluation, and they are relied on extensively in gifted program evaluation. However, the methodological tail should not wag the dog. The most appropriate approach for the task at hand should be selected. Comparisons of pre- and post-test standardized achievement scores of gifted and talented children do not produce significant outcomes and should not be expected to produce any if the students are being selected appropriately.[2] Moreover, outcomes alone are worthless without some indication of whether students are achieving stated goals and objectives. There are many forms of quantitative data, other than standardized tests, that can document the effectiveness of gifted programs, including the number of and frequency of participation in intellectually competitive activities—such as Science Fairs, Westinghouse, Putnam (math), and other engaging enterprises—as well as more mundane figures such as attendance, books read, portraits and recitals completed, number entering post-secondary institutions, and so on. Per-pupil cost figures contribute to a cost-effectiveness analysis. Longitudinal follow-up data on student academic and employment careers provide some insight into program impact. Together, qualitative and quantitative approaches effectively document and analyze evaluation data. (See Coleman, 1985; Fetterman, 1988a; Gallagher 1985; Howley, Howley, & Pendarvis, 1986; Kitano & Kirby, 1986; Reis & Renzulli, 1991; Renzulli, 1975; Renzulli & Ward, 1969 for a detailed discussion about evaluating gifted and talented education programs. In addition, see Fetterman, 1988b for a discussion about the variety of qualitative approaches to evaluation in education.)

Communication and Summing Up

Writing is part of the analysis process; it clarifies and organizes thought and helps to specify ideas and relationships (see Fetterman, 1989; Hammersley & Atkinson, 1983). In some instances evaluators discover in the process of writing that they have gaps in their knowledge. If they are still in the process of (or involved in) reviewing a gifted and talented education program, they have the opportunity to conduct additional interviews and observe specific settings. If they have left the school setting, they have only their records and notes to rely on. Frequently embryonic ideas come to maturity during writing, as the evaluator is forced to crystallize his or her thinking on a particular topic. The reporting of findings usually takes place in memoranda and a final report. An interim report may prove a useful tool as well.

Communication and Program Practice

Evaluators must communicate their findings and recommendations if they are going to be effective. Verbal communications and memoranda issued throughout an evaluation keep evaluators and program personnel on track and provide a quality control on the data while the evaluation is still in progress. (By the time the final report is written, it is often too late to correct erroneous ideas that have been used to build the conceptual foundation of the evaluation findings.) Interim reports are valuable forms of communication for program participants, sponsors, and evaluators. They create benchmarks in the study and provide interested parties with findings in progress, current thinking, and a progress report on the evolving direction of the evaluation. All of these interim forms of communication minimize surprises, gross errors, and related problems. The final report puts a cap on the entire experience for the evaluator, participants, and sponsor and typically includes recommendations that, if used properly, will serve as a guide to improve program practice.

Concluding Thoughts

Evaluation is needed to learn how a gifted program works, how effective programs are, and how to raise their standards of quality. Self-evaluations should be a routine part of daily program activity. Students, teachers, administrators, and parents should be encouraged to conduct informal self-appraisals on a daily or at least weekly basis, questioning and comparing what students are doing in relation to stated program goals and objectives. Systems should be developed to give regular feedback to students, teachers, administrators, and parents, including parent-teacher conferences, faculty meetings, and student performance conferences.

In addition, external and independent evaluations ensure a more objective and credible appraisal. Formative[3] evaluations provide a continual flow of information to program officials throughout a review to improve program practice. Summative[4] evaluations can complement formative evaluations. The knowledge gained at the end of a summative evaluation culminates in a final report with a focus on policy decision making. Evaluations, whether qualitative or quantitative, formative or summative can improve program practice and student performance. Independent evaluations are also required to establish the utility of such approaches in gifted education as acceleration, enrichment, and special group settings.

Few programs can't be improved by a critical review. If unexamined, the health and well-being of gifted and talented children and the future of the nation are at risk. Together, these approaches play an essential part in the development, maintenance, and understanding of educational programs for the gifted and talented. (A more detailed discussion about these concepts, techniques, and approaches is provided in the full report which can be obtained by contacting The National Research Center on the Gifted and Talented.)

Case Study: An Illustration

An annotated case study of an evaluation of a gifted and talented program appeared in *Excellence and Equality: A Qualitatively Different Perspective on Gifted and Talented Education* (Fetterman, 1988). This case study highlighted many of the methods, concepts, and techniques presented in this discussion. In addition, it demonstrated the scope of evaluation. This evaluation included an analysis of the referral, identification, and selection mechanisms, as well as a review of the entire program operation. It also

served as a national test case for gifted and talented education and minority enrollment. Fundamentally, the evaluation addressed the issues of equal opportunity, ability, and achievement in American education.

General Evaluation Guidelines

Guideline One: Make sure the evaluation serves the practical information needed by the targeted audiences.

Discussion: Take time to identify who the key stakeholders are including administrators, parents, teachers, and students. Find out what they want to know and then develop a plan to address the most salient concerns.

Guideline Two: Make sure the evaluation is realistic (politically and pragmatically) and cost effective.

Discussion: There is no point in conducting an evaluation if there is no political support for a program or if there is good reason to believe the findings will be hidden or altered. Care must also be taken to ensure that an evaluation effort does not significantly drain program resources.

Guideline Three: Make sure that the evaluation is conducted in an ethical manner.

Discussion: The rights of program participants must be protected. Care should be taken to ensure privacy, freedom of information, and confidentiality (if promised).

Guideline Four: Make sure the evaluation is as accurate as possible.

Discussion: Take the time to seek out various sources of information and cross-check data sources. Double check all figures and interview notes. Judgments about the data should be logical and reviewed by independent sources whenever possible.

For a more detailed discussion of evaluation standards and guidelines see *The Program Evaluation Standards* by the Joint Committee on Standards for Educational Evaluation (1992) and Rossi's *Standards for Evaluation Practice* (1982).

Specific Guidelines for Evaluating Gifted and Talented Education Programs

Guideline One: Make sure program documentation exists.

Discussion: Program documentation should describe the program's philosophy; curriculum; staffing; financial, library, and computer resources; identification and screening procedures; and selection criteria. In addition, classroom schedules and maps of the physical layout will facilitate any evaluation.

Guideline Two: Make sure you review as many relevant data sources as possible.

Discussion: Interviews and observations are critical. In addition, archival documentation, such as newsletters, financial reports, student letters, parent letters, past evaluation reports, newspaper articles, and many other documents provide pertinent data about the program's impact and role in the community.

Guideline Three: Make sure you compare the program's stated goals with their actual performance.

Discussion: Does the program operate in accordance with its own philosophy (academically and in terms of governance)? Does the curriculum reflect the philosophy and goals of the school? Do the staff members appear to understand and implement the stated program philosophy? How do teachers translate the program's philosophy into practice in their teaching?

Guideline Four: Make sure you describe and assess the climate.

Discussion: Are students engaged? Are teachers stimulating, thoughtful, and knowledgeable? Is communication between staff and administration constructive and cooperative or antagonistic and fragmented? Similarly, what is the nature and tone of communication with and among students.

Guideline Five: Make sure you talk to students.

Discussion: The purpose of gifted and talented education programs is to serve students. Time should be devoted to informally interview students about their own progress (including a review of their portfolio, records, or projects) and their evaluation of the program. Student academic achievement and behavior code data are critical to any gifted and talented education program evaluation.

Guideline Six: Make sure program finances are reviewed.

Discussion: Is the program budget sufficient, if not, why not? Is the money being used as intended, if not, why not? Is financial program planning adequate and appropriate to meet the needs of the program in the foreseeable future?

Guideline Seven: Make sure community and school board components are included in the evaluation.

Discussion: Do community and school board members support the program? What is the evidence? Do parents participate in the program? What are the obstacles to community and board support if any?

Notes

[1] During my presidency of the American Evaluation Association, I created the concept empowerment evaluation. This involves using evaluation to help others help themselves. One facet of this approach involves encouraging program participants to conduct their own evaluations and to share useful models and concepts with them to help them help themselves.

[2] However, they can be used to document change over time in student performance, particularly for underachievers and students from culturally diverse backgrounds.

[3] Scriven refers to formative evaluation as evaluation aimed at the improvement of an ongoing enterprise (see Davis, Scriven, & Thomas, 1981).

[4] According to Davis, Scriven, and Thomas (1981), summative evaluation is conducted for an external client and its primary purpose is to report on the quality of the program for purposes other than improvement.

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Evaluate Yourself

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Introduction

Gifted and talented education programs,[1] perhaps more acutely than most educational programs, require a clearsighted and self-critical awareness of program strengths and goals to promote intellectual and artistic growth. Such awareness is fostered through an ongoing process of self-evaluation. Administrators, teachers, counselors, parents, and students, working as a team, can play an active role in evaluating, shaping, and continually improving their program by taking a critical look at program achievements, objectives, and the day-to-day realities of program performance. This discussion will highlight some of the common sense ways of reflecting upon one's programmatic achievements and shortcomings, and discuss briefly the value of an external evaluation component in that reflective process. It will also provide standard questions to ask in the process of an evaluation and outline both general evaluation guidelines and guidelines specific to the evaluation of gifted and talented education programs. These guidelines can be adapted to the individual local context. A detailed case example is presented to illustrate the scope and multifaceted nature of a program evaluation. In addition, it highlights some of the methods and concepts discussed in this presentation.

This presentation is designed for multiple audiences. It provides a general direction for administrators, encouraging them to conduct self-evaluations and providing some guidelines for selecting an outside evaluation expert to assist in the evaluation process. It also serves as an orientation for gifted and talented staff members who play a role in conducting self-evaluations. Finally, it aims to sensitize trained evaluators new to the field of gifted and talented program evaluation to some of the field's nuances.

This presentation is an overview about evaluation, not a simple how-to instruction booklet. Although I am a major proponent of individuals taking evaluation into their own hands and conducting self-evaluations, I do not consider one brief discussion sufficient preparation for a critical program review. This discussion is a first step, a primer, which should be supplemented with reports, texts, classroom instruction, and apprenticeship experiences if possible. A variety of recommended texts on evaluation are mentioned throughout this presentation. Gifted and talented practitioners new to evaluation should seek the assistance of an evaluator to act as coach, assisting in the design and execution of an evaluation.

A word or two about the staffing structure or configuration of evaluations is in order before launching into critical evaluation concepts and techniques. The team approach is the most common and often the most effective method of conducting self- or external evaluations. A typical self-evaluation team is composed of teachers, counselors, administrators, parents, and a student. Local experts, board members, and gifted and talented program officials are recruited to serve whenever possible. The team develops

an evaluation plan, based on input from key stakeholders in the school and community. Evaluation tasks—including interviews, observations, and reviews of records—are divided and distributed to appropriate team members, who execute them. The team assembles at various points in the process to share notes, report on progress, and suggest areas requiring additional investigation. Team members explore new leads and cross-check each other's data. The team chair is typically charged with the responsibility of producing an evaluation report. The team approach makes it possible to conduct a full-scale evaluation within the tight time and budget constraints typical of an educational program. It also ensures a balanced perspective, as team members cross-validate each others' judgments and observations, providing a continual check against individual observer bias.

An external evaluation team has a similar structure and process. However, an external evaluation team is typically composed of individuals outside the program, including other gifted and talented program directors, practitioner-scholars in the field, teachers, and community members. Parents and students may also be recruited to join the evaluation team.

Self-examination[2]

Many of the concepts and techniques of self-evaluation derive from traditional external evaluation. Self-evaluations follow the same general model that external evaluations use. In addition, evaluation provides useful concepts to guide an effective self-examination, including maintaining a nonjudgmental orientation, soliciting views from the insider's perspective, and triangulating data.[3] Evaluation concepts underlie the most important techniques, including observation, interviewing, and participation. These concepts provide the lens through which observations are made and interview questions are asked in the field. Evaluation concepts and techniques are useful guides in any program inquiry, from a study of pragmatic concerns about fiscal resources to an investigation of larger social issues such as minority enrollment.

Evaluation Model

A typical model of program self-assessment, derived from traditional evaluations, involves:

1. Determining goals and outcomes
2. Describing the processes required to accomplish goals and objectives
3. Determining the immediate, direct, short-term effects of the program (comparing evidence of outcomes)
4. Determining the long-term effects of the program

A conscientious effort should be made to determine the goals of the specific gifted program. The goals should be specific, realistic, and measurable. For example, an artistic program may establish a goal of every student performing a recital by the end of the year. An academic math/science program might select as goals having a certain percentage of the student body enter and win the Westinghouse Science Talent Search and Putnam Mathematical competitions. Goals can range from having students perform

at two grades levels beyond their chronological peers, to having them volunteer 400 hours to public service projects or conduct research, literary, or dramatic projects. Whatever the goal, it is important for the evaluators to recognize the program's explicit target outcomes before undertaking an evaluation of that program.

The second major step is to describe what the program is doing to accomplish its stated objectives. This requires continual monitoring of program operations, as well as discussions with administrators, teachers, and students. Observations of this nature will help shape questions about accountability and help explain why the program is or isn't working. In addition, monitoring the program on a routine basis helps administrators, teachers, and students keep it on course—aimed at accomplishing the stated objectives of the program. Ideally, evaluation data can be used to improve program operations and eliminate ineffective and wasteful facets of the program.

The third step is to determine the program's immediate or direct impact. Are gifted and talented students performing at two grades levels beyond their chronological peers? Are students entering science and mathematical competitions at the numbers and level desired or expected? Are teachers providing a qualitatively different educational experience for gifted and talented students, in terms of depth and pace of study? Useful sources of information for this stage of the evaluation include interviews with administrators, teachers, students, and parents, observations of administrative and classroom behavior, and archival data such as past evaluation reports, standardized test results, student and program portfolios, and local newspaper articles. This is the stage of an evaluation that requires particular attention to validity[4] and reliability. These concepts are described in depth in standard evaluation and measurement textbooks. In general, the evaluator must be sure to select an accurate and valid measure to determine whether a goal has been achieved. Such a measure can be scores on achievement tests, community service records, or a dramatic production. The measure selected should also be reliable or stable—in other words, it should provide the same information about a specific situation or set of circumstances over time (assuming nothing has changed about the situation).

A final step is to consider the program's long-term or ultimate effect. Has the gifted and talented program contributed to the academic standing of the school in the community, the state, and the nation? Are more gifted and talented students entering and completing undergraduate and graduate degree programs? Are more gifted and talented program graduates making productive business, medical, or scientific contributions? Typically, few programs maintain comprehensive or systematic longitudinal data on their graduates. However, such data provide one of the best and least expensive sources of useful impact information.

Evaluation Concepts and Techniques

Nonjudgmental Orientation

A nonjudgmental orientation requires the evaluator to suspend value judgments about a given behavior or practice. It is similar to our habit of suspending our disbelief while watching a play or a movie: We allow the author a certain latitude and the time to unravel the whole story before judging the credibility of the work. A nonjudgmental orientation allows the educational evaluator to describe an observed behavior or situation in detail—however bizarre or obvious it appears at first glance—before completing an analysis of classroom behavior in context. Recommending a nonjudgmental orientation in an evaluation may sound contradictory, but such a stance is essential in allowing the evaluator to collect a full range of data before screening certain areas out of

consideration. This orientation is particularly important in an evaluation of gifted programs, in which novel, creative, and periodically "strange" teaching approaches are adopted. For example, a judgmental evaluator watching a classroom of dancing students might assume that the class was involved simply in a dance exercise and thus conclude that gifted and talented programs are characterized by play rather than content. A nonjudgmental evaluator would conduct additional observation and/or interviews that could reveal that the class was an eighth-grade physics course engaged in an exciting and appropriate approach to demonstrating how long and short light waves operate. A nonjudgmental orientation thus prevents premature and in many cases inappropriate assessments of a specific approach or behavior and ensures that there are enough data to interpret it meaningfully or place it in context. (See Appendix A for additional discussion about a nonjudgmental orientation.)

Insider's Perspective

A sound self-examination is grounded in the participants' views of what they are doing, what they are trying to accomplish, and what they think they have accomplished. Every educational evaluation should attempt to solicit the views of administrators, teachers, students, and parents. Even longtime participants in a program can be surprised and enlightened by other participants' views on the situation. And when the evaluator's own views are confirmed by interviews with others, the evaluator has strengthened the assessment by grounding knowledge in data from others living in and with the situation day to day.

Students, teachers, and administrators may have radically different world views or ways of looking at the same educational practices. These different perspectives are a natural function of differing roles, values, status, and power. However, when perspectives appear irreconcilably different, the parties involved are most likely not operating with a system of shared values. Identifying this type of problem, which is often at the heart of poorly conceived programs, can explain much of the miscommunication observed in a program. Thus, describing a program (including processes and outcomes) and the most salient behaviors (including identification practices, teaching, and learning) can help in making a determination about whether the practices or behaviors are adaptive or maladaptive for students, teachers, administrators, and parents—and why. When interviews and observations are grounded in the insiders' views of how a program works, findings are considered more salient and recommendations more realistic and practical. In addition, the evaluation can identify and contrast multiple program goals with actual performance.[5] (See Appendix B for additional discussion about the insider's perspective.)

Triangulation

Triangulation is another invaluable concept that any program participant can use to guide an effective self-evaluation. Triangulation is used to analyze data. It involves testing one source of information against another to strip away alternative explanations. For example, an evaluator might think that a gifted and talented program was primarily a Humanities-literature oriented program because students were observed discussing literature, reciting lines from plays, and critiquing each other's literary reports during most of the week. However, a review of the program calendar might indicate that this flurry of activity was merely the culmination of the Humanities portion of a much broader program. Similarly, a student might say that he is getting straight As. Comparing these statements with program records and teacher evaluations not only establishes the student's credibility, but more importantly, reveals participants' (often differing)

perspectives about the program. For example, the evaluator might find corroborating evidence that the student is receiving straight As, but might also learn that the grades have gone to the student's head, according to a peer. Teachers may indicate that although the student is doing very well, in fact no grades are given in the program. In interviews, other students may confirm this official policy and then explain how they are informally ranked according to ability throughout the program. Thus triangulation may help confirm or disprove information and can force the evaluator to probe further to reveal another level of information.[6] In both cases, the evaluator learns something about the program's effectiveness and about how well it matches its stated philosophy in practice.[7]

Triangulation is at the cornerstone of every gifted and talented education program evaluation. This approach requires the collection of basic program documentation, such as statements describing the program's philosophy, curriculum, staffing, finances, as well as information about identification, screening, and selection criteria. Then the evaluator must collect additional data from observations and interviews and other sources to compare it with the stated policies, goals, and objectives. Triangulation allows the evaluator to penetrate the veneer of a program. It also allows program participants to see themselves as they really are as compared with how they would like to see themselves. In this process, evaluation can help program participants approximate their goals and objectives and thus more closely resemble their idealized picture of themselves. (See Appendix C for additional discussion about triangulation.)

Observation

There is no adequate substitute for direct, daily observation in evaluation. In a self-evaluation, teachers can observe students systematically—for example, observing whether different cultural groups interact, whether shy students become more outgoing, when a lesson plan is engaging, or whether an administrator participates in teaching or social activities associated with the program. Over time, patterns of behavior will become evident. These patterns, documented repeatedly over time, are a form of reliability. Observations can be used to establish baseline descriptions about the program, teacher and student performance, administrative support, and many other program-related features. Similarly, observations can be recorded to document change (and possibly growth) over time. Observations can be filed in a student portfolio to document student performance throughout the year, noting, for example, increasing sophistication in research projects, mastery of artistic expression, or complexity of mathematical problem solving.

Portfolio reviews should determine if any documentation is being maintained, if it is being maintained on a regular basis, and if it is relevant or appropriate. Progressive stages of development should be discernible in a portfolio. For example, summaries of student research projects with increasing levels of complexity and sophistication should be maintained and dated in the file, documentation of mastery over specific art forms should be compiled in a student portfolio, verbatim quotations about student self-assessment and teacher assessments of students should be maintained on a regular basis, newspaper articles about specific student accomplishments should be readily available, and records (and results) of participation in contests and award ceremonies should be compiled. These documents provide an ongoing record of student performance and an excellent data bank for evaluators. On-site observation is useful to help compile student portfolio data and to verify that the information is useful and accurate.

Observations are useful in the discovery, compilation, and verification of data. The simple act of sitting in the classroom observing instructional activities may provide

such insights as: real attendance as compared with attendance figures, minority enrollment, defacto segregation, student engagement, instructional philosophy and practice, use and availability of school and community resources, and many other significant indicators of program practice. Observations can provide data about student behavior code patterns, quality of the physical plant (including delayed maintenance) and parental participation. Observations of communication patterns in the classrooms, the hallways, the teachers' lounge, or the playground may also be indicative of either adaptive or maladaptive instructional styles or governance practices. Triangulated data from observations, interviews, and physical indicators (like the presence or absence of awards or graffiti) can provide a useful insight into the school's climate. Observation is a natural tool; it is enhanced when guided by the concepts described above. (See Appendix D for additional discussion about participant observation.)

Interviews

Often the best way to check on or triangulate observation is simply to ask the observed participants what they were doing. A student singing in chorus may seem to enjoy herself. An interview with that student may reveal, however, that she hates chorus and is participating in it only because her parents insist. Interviews should be open ended—that is, they should allow the person being interviewed to answer in as full and complete a manner as he or she deems appropriate. Closed yes-or-no questions are quick and efficient, but they are usually biased by the person conducting the interview and tend to shape the response. Closed questions are useful after initial interviews and observations suggest what the relevant questions are—starting from the insider's perspective. (See Appendix E for additional discussion about interviews.)

Evaluation team members should interview key stakeholders and other team members to construct a useful list of questions to evaluate a gifted and talented education program. A list of standard questions to guide a gifted and talented education program evaluation has been provided below. These questions have evolved from more open-ended questions. This list is neither exhaustive nor all-inclusive; it is simply designed to guide an evaluation effort. These generic questions should be tailored to the specific audiences that are most appropriate, using the concepts and techniques described above.

Evaluation Questions

1. Is there any program documentation about the philosophy, curriculum, finances, and staffing about the program?

2. Is there any documentation about the identification, screening, and selection criteria?

3. Are the identification, screening, and selection criteria appropriate for the program in operation? (Typical programs have an academic focus—for example, humanities, mathematics, or science; some programs focus on visual and performing arts.)

4. Has the program conducted either internal or external evaluations? Have these records been maintained? What were the findings and recommendations? Were the recommendations followed, and why or why not?

5. Does the program operate in accordance with its own philosophy?

6. Does the curriculum reflect the philosophy and goals of the school program?

7. Do staff members understand and implement the stated program philosophy?

8. Do staff members work well together?

9. Do they think they are provided with adequate and appropriate support, ranging from supplies to compensation packages? What preparation time and professional development funds are available for teachers? Do teachers find them adequate or appropriate?

10. Are students engaged? Is there any observation, product, interview, or other documentation of critical and creative thinking in the program?

11. What do students think about the program? Do they like one topic or teacher more than another? Why?

12. What does the budget look like? How was it developed? Is it adequate?

13. What are the level and quality of community support or interaction? Are there obstacles to community or board support?

Participation

In any educational evaluation, the most credible interviews and observations are conducted by evaluators who spend time with program participants. In this sense, evaluators who are also participants, who share in the daily lives of students, teachers, administrators, and parents, have a much more comprehensive picture of how a gifted and talented program operates than the evaluator who simply comes in once in a year, asks a few questions, observes a few classes, and then writes a report about the program. There is no substitute for the depth of understanding gained from routine participation in classroom activity, extracurricular activity, home activity, faculty meetings, and school board meetings. Direct participation exposes the evaluator to the multiple levels and goals of program participants and affiliates. It also enhances the validity of the evaluation findings.[8]

It is clear from this brief discussion that program participants can—and in many cases do—apply evaluation concepts and techniques in their daily lives in gifted and talented programs. Observation, measurement, documentation, and evaluation are all normal activities of teachers, students, parents, and administrators. Combining these concepts and techniques simply helps to make these activities more systematic and improves the validity and reliability of the self-evaluation.

External Evaluation

Self-examinations and external evaluations, in addition to sharing concepts and techniques, can complement each other and help to cross validate data from each approach. Self-evaluations help maintain an educational program's health on a daily basis; expert external evaluation is essential to an in-depth and objective understanding. External evaluators offer training and experience and an "objective eye" rarely found

inside a program. They can help identify goals and objectives at the onset of a program and can help participants take stock of an ongoing program. They can help establish standards, benchmarks, and milestones with which to measure student, teacher, administrator, and program performance against multiple goals. External evaluators can also provide feedback about progress toward those goals and inform policy decision makers about the impact of a program in a credible fashion. External evaluation plays an invaluable role in refining healthy programs and has a significant impact on future funding and programmatic concerns.

Working With an External Evaluator

An external evaluator should be chosen as carefully as a personal physician—the life of the program may depend on that choice. Choosing a suitable evaluator can also help eliminate future problems. For example, a gifted and talented program should be developed with the assistance of an evaluator, but it should not be developed to meet the evaluator's needs. Such an approach can skew the program toward easily quantifiable elements instead of goals which are more difficult to measure, such as higher order thinking goals. Selecting an evaluator who is familiar with gifted and talented programs will minimize that kind of problem. Screening and selecting the right evaluator is only half the job, however. Participants must also communicate openly with the evaluator throughout the evaluation process—even the most talented investigator needs the help of participants.

In addition, participants need to recognize that the external evaluator must be an independent observer. Independence is essential not only to ensure honest and reasonably objective feedback about the condition of the program, but to satisfy external agencies of the reliability and validity of the evaluator's finding. Sponsors typically demand an external evaluation to determine whether taxpayer money is being spent prudently and whether the program is educationally on track.

Finally, participants need to listen carefully to the external evaluator's assessment. This does not mean that a program should blindly follow any and all recommendations. However, ignoring sound—even if unpleasant—advice can have serious consequences. Unchecked, administrative and curricular problems can become deeply ingrained in the body of the program, compounding the difficulties year after year. External evaluations are more expensive than self-evaluations, but like an annual physical, they are worth the time and investment.

Qualitative and Quantitative Approaches

External evaluations, like self-evaluations, should combine qualitative and quantitative approaches. Qualitative approaches are used to describe a program, its operation, and its effects. They are also required to establish the appropriate baseline or context within which to interpret student performance. An accurate measure of student performance requires preentry information about student, program, and community characteristics, including cultural, social, political, and economic factors. For example, it is important to document whether the evaluation focuses on a program that is just starting up or is a mature program operating for years. In addition, an accurate measure of how far a student has traveled requires qualitative and quantitative baseline data about the student's previous attendance patterns, grades, reading level, achievement record, and so on. Such data can also indicate whether a student is underachieving.[9] In addition, qualitative approaches (such as ethnography, an established qualitative approach in evaluation) describe program implementation in sufficient detail to explicate the multiple

goals of a program; delineate the process in which students, teachers, administrators, and parents interact (in school and at home); and highlight adaptive and maladaptive social arrangements. (See Fetterman, 1989 for a step-by-step guide to this process.)

A description of the program can determine whether or not student identification techniques and program approaches match.[10] In addition, a description of the process of how students and teachers function enables program and policy officials to make program modifications that can enhance student outcomes. Gifted and talented programs are particularly amenable to the use of qualitative approaches, in that creative approaches to teaching can be described and documented with minimal obtrusiveness.

Qualitative information can also be used to document program effects. The data are readily available in gifted programs and can contribute to a more objective and useful evaluation. For example, in an arts-oriented gifted program a portfolio of the student's accomplishments or products can be rated from beginner to professional quality. This would produce useful entry, mid-course, and end-of-year program data. In addition to documenting outcomes over time, the same data can be compared to program description data to draw causal inferences about specific elements of the program, such as teacher dedication, and specific outcomes, such as student participation in mathematical competitions.[11] Similarly, teams can be assembled to rate academic portfolios throughout the year—focusing on pre-established criteria, including mastery in linguistic and scientific domains.

Converting qualitative data about program variables into a quantitative format can facilitate comparison and analysis of program effects. For example, student participation in the program could be translated or converted into zero to five days a week, concerning gender—males could be coded as one and females as two in a binary fashion, time of day—morning coded one and afternoon two, topic—English coded one and mathematics two, and specific instructional approach—lecture coded one and team teaching two. This simple qualitative/quantitative conversion would facilitate analysis of the qualitative data, enabling the evaluator to determine the effects of a program including differential effects on different students. This example alone would provide an insight into general program outcomes, as well as effects of different amounts or types of instruction, student gender, and time of day. It would also describe how these variables interacted. Using qualitative data to describe program effects is one of the most promising (and needed) approaches to developing more meaningful evaluations of gifted and talented programs.[12] (See Miles & Huberman, 1984 for a detailed discussion about qualitative data analysis.)

Quantitative measures document outcomes, including student achievement over time. Standardized tests have been considered the "coin of the realm" for many years in evaluation, and they are relied on extensively in gifted program evaluation. However, the methodological tail should not wag the dog. The most appropriate approach for the task at hand should be selected. Comparisons of pre- and post-test standardized achievement scores of gifted and talented children in an academically-oriented program do not produce significant outcomes and should not be expected to produce any if the students are being selected appropriately.[13] Moreover, outcomes alone are worthless without some indication of whether students are achieving stated goals and objectives. There are many forms of quantitative data, other than standardized tests, that can document the effectiveness of gifted programs, including the number and frequency of participation in intellectually competitive activities—such as science fairs, the Westinghouse Science competition, Putnam (math) contest, and other engaging enterprises—as well as more mundane figures such as attendance, books read, portraits and recitals completed, number entering post-secondary institutions, and so on. Contract systems provide useful

quantifiable outcome data that is easily verifiable, concerning the extent to which students are achieving stated goals and objectives. Teacher and student survey questionnaires and rating scales can be developed that focus on specific topics.

For example, an open alternative classroom survey might ask the following questions:

1. Does the teacher provide multiple resources?
2. Is the curriculum driven by a collaborative effort?
3. Does the teacher provide varied, interactive learning experiences?
4. Does the teacher provide cooperative learning experiences?
5. Does the teacher facilitate student self-evaluation?
6. Does the teacher identify student learning styles?
7. Does the teacher communicate with multiple groups?
8. Does the teacher encourage student decision-making?
9. Does the teacher expect critical-creative thinking?

Student ratings of teachers can focus on whether assignments are clear, instruction is challenging, the teacher listens to the students, the teacher is enthusiastic about the subject, the teacher is knowledgeable about the subject, and so on. A survey about students might ask:

1. Is the student involved or engaged in classroom activity without continuous supervision?
2. Does the student have curricular options?
3. Does the student continue to study in the middle of other student activity?
4. Does the student interact constructively with other students?
5. Do students assess themselves and maintain records of their progress?
6. Does the student have the appropriate materials and support services to function effectively?
7. Does the student communicate effectively with the teacher?
8. Does the student work with other students?
9. Does the student exhibit critical-creative thinking?

All these questions, including the classroom survey, student survey, and student ratings of teachers, can be rated according to a five-point scale and the distributions analyzed. (Minimally, yes and no responses would be supplemented with explanations of why or why not as appropriate.) Patterns can be identified to reveal perceptions about the

program's overall effectiveness and specific strengths and weaknesses. Per-pupil cost figures contribute to a cost-benefit analysis. (See Levin, 1983, for a detailed discussion about conducting a cost-benefit and cost-effectiveness analysis in an educational setting.) Longitudinal follow-up data on student academic and employment careers provide insight into program impact. Together, qualitative and quantitative approaches effectively document and analyze evaluation data. (See Coleman, 1985; Fetterman, 1988a; Gallagher, 1985; Howley et al, 1986; Kitano & Kirby, 1986; Reis & Renzulli, 1991; Renzulli, 1975; Renzulli & Ward 1969, for a detailed discussion about evaluating gifted and talented education programs.[14] In addition, see Fetterman, 1988b for a discussion about the variety of qualitative approaches to evaluation in education.[15])

Communication and Summing Up

Writing is part of the analysis process; it clarifies and organizes thought and helps to specify ideas and relationships. (See Fetterman, 1989; Hammersley & Atkinson, 1983.) In some instances evaluators discover in the process of writing that they have gaps in their knowledge. If they are still in the process of (or involved in) reviewing a gifted and talented education program, they have the opportunity to conduct additional interviews and observe specific settings. If they have left the school setting, they have only their records and notes to rely on. Frequently embryonic ideas come to maturity during writing, as the evaluator is forced to crystallize his or her thinking on a particular topic. The reporting of findings usually takes place in memoranda and a final report. An interim report may prove a useful tool as well.

Memoranda

Memoranda are summaries of the research effort written during various stages of the work. They help to synthesize the evaluation and provide a gauge of progress. They can also help to consolidate the evaluators' understanding of a situation. They can be shared with other evaluation team members and with program participants to solicit their feedback. This interactive process of reporting places a check on each evaluator's comprehension of a situation before that understanding is used as a building block to comprehend the next stage of development. In addition, it provides other program participants with an opportunity to share in the evaluation process and gain a wider view of the educational experience.

Writing memoranda throughout a study also simplifies report writing. The core of the report can usually be drawn directly from the memoranda produced throughout the study. Virtually all the evaluators have left to do is the final synthesis based on how all the memoranda and the responses fit together. In a well-documented evaluation, the final report should hold no significant surprises for participants.

Interim Reports

Interim reports are preliminary summaries or drafts of the evaluators' knowledge up to a prespecified deadline. They are shared with participants and colleagues for review. They provide another test of the evaluators' understanding of the program or culture and provide specific feedback concerning each aspect of the report. As such, they can be an invaluable contribution to the quality of the research effort.

Final Reports

Final reports are essential, whether the study is a self-evaluation or an external evaluation. A written record puts findings in black and white for all parties to discuss. Verbal communications are shaped and reshaped and often lost over time. A written record allows participants to return to it to measure progress.

A final evaluation report is pragmatic. It is likely to have an immediate impact on the program studied. The language should, therefore, be clear and concise and free of confusing jargon. The body of the final report typically consists of an introduction, background, findings, discussion, conclusion, and recommendations. Final reports are usually prefaced with an executive summary for policymakers and others who haven't the time or the inclination to read the report in its entirety.

Communication and Program Practice

Evaluators must communicate their findings and recommendations if they are going to be effective. Verbal communications and memoranda issued throughout an evaluation keep evaluators and program personnel on track and provide a quality control on the data while the evaluation is still in progress. (By the time the final report is written, it is often too late to correct erroneous ideas that have been used to build the conceptual foundation of the evaluation findings.) Interim reports are valuable forms of communication for program participants, sponsors, and evaluators. They create benchmarks in the study and provide interested parties with findings in progress, current thinking, and a progress report on the evolving direction of the evaluation. All of these interim forms of communication minimize surprises, gross errors, and related problems. The final report puts a cap on the entire experience for the evaluator, participants, and sponsor and typically includes recommendations that, if used properly, will serve as a guide to improve program practice.

Case Study: Hartland

An annotated case study of an evaluation of a gifted and talented program in Hartland *(pseudonym)* serves to highlight many of the methods, concepts, and techniques presented in this discussion. In addition, it demonstrates the scope of evaluation. This case study presents the context, including background information about the program problem, provides an illustration of a program description, and highlights the role of verbatim quotations as a valuable data source and a powerful tool in reporting findings.

This case study also presents an analysis and assessment of standard gifted and talented program mechanisms, specifically referral, identification, and selection criteria and procedures. Recommended refinements to these mechanisms are also discussed. The case study demonstrates how an analysis of underlying factors may be required. In this case, the socioeconomic context of the community provided a useful insight into minority representation in the program. The evaluation served as a national test case for gifted and talented education and minority enrollment.

Evaluation periodically addresses larger sociopolitical concerns. The Hartland evaluation addressed the issues of equal opportunity, ability, and achievement in American education. It also discussed controversial issues such as the quota system. Finally, the evaluation dramatically illustrated the complexities and pressures associated with presenting evaluation findings, reports, and recommendations in the public arena.

Importance of Context

This brief introduction to the evaluation illustrates how evaluation designs are shaped. All evaluations are shaped by a specific concern or set of concerns, ranging from academic and fiscal accountability to program improvement. The scope of this evaluation was shaped by a particular problem—minority enrollment. An evaluation of the entire program was needed, and thus many of the specific evaluation steps taken would have been needed in any evaluation. However, the evaluation resources were focused on addressing the problem. All of the programmatic component reviews were conducted in the context of this concern.

Gifted programs throughout the country share the problem of low minority enrollment (see Humphreys 1984; Lemke 1984). The Hartland school district received national attention for its failure to enroll a proportional percentage of black children in the gifted program in the early 1980s. According to a newspaper, "the gifted and talented program is in danger of losing $57,000 in state funding because of a finding [by a state study] that the program discriminates against minorities" (pp. 3-4). The minority enrollment figures did represent a red flag. Blacks represented 40 percent of the third-grade population, from which the gifted program participants were drawn. However, only 0.4 percent of this population was selected to participate in the program.

The battle lines on the state political level were clearly drawn. The State Board of Education withheld funds because the selection process had not produced proportional minority representation in the program. The school board voted to sue the state unless the two parties could come to an agreement. In the meantime, the district refused to alter its procedures, believing that they were sound and adhered to state policies and procedures. Each party sincerely desired to resolve the matter on its own terms. As a result of this standoff, the state and the district agreed that an independent evaluation of the program would be useful. The state presented a list of evaluators; however, the list included individuals who had already concluded in an earlier study that the program selection process was seriously flawed. The district wanted to know if a problem existed, but at the same time it feared a study with a foregone conclusion, for practical and political reasons. A compromise was struck. The district decided to look for an outside evaluator who had experience in gifted education and a reputation for fairness, and the state agreed to look at the report. The district called Stanford University and requested my assistance.

All evaluations have a focal point. Ideally, the evaluator makes this focus explicit and determines whether the focal point is directly relevant to the specific problems faced by the program at the time as well as to generic programmatic concerns. This is typically determined through interviews with key stakeholders, sponsors, policymakers, and participants as well as a review of archival material about the program during the first phase of an evaluation.

Program Description

Program descriptions—a first step in any program evaluation—are drawn from a variety of sources and include a brief description of the program and some of its educational processes. The program description that follows was developed from interviews with students, graduates of the program, teachers, parents, and community members on site. In addition, it required observations of and participation in classroom, extramural, and home activities. Archival material was also instrumental in building the history of the program and identifying corroborating forms of information—triangulating data.

The Academically Gifted Program serves gifted children from grades four through eight. Gifted students are drawn from the entire district to study in an all-day homogeneous grouping program. Consolidating the gifted program in one building has not fostered elitist behavior. One principal described it as a leveling experience for many students who've been used to being the top student in everything they do.

The gifted program began as an experimental program in 1963 and the program was adopted on the basis of the evaluation results. The program, which is based on a high ability and high achievement enrichment model, has a core curriculum similar to the district's curriculum. Additional activities and course requirements supplement the gifted program's basic curriculum. Special courses, including speed reading, foreign language, speech, debate, archaeology, and anthropology are also offered. Students also routinely take part in special interest activities such as intramural sports, computers, sewing, drawing, and photography.

In many respects, the enriched curriculum offers gifted students an educational experience that differs qualitatively from that offered their chronological peers in the regular school program. Speed reading is provided for seventh-grade students. According to the principal and the reading teacher, "Speed itself is not the primary goal." Students were observed reading at 800, 900, and 1,200 words per minute. However, they learn to vary their speed depending on the text they are reading.

Foreign language training begins in the fourth grade. The first three years of the program stress conversation. During one class, conversational contests were used to make foreign language instruction more exciting. Students were given one minute to engage in conversations using specified words. The competition required precision in comprehension and pronunciation. The program enables students to enter second- or third-year foreign language training in high school. It also provides students studying French the opportunity to live in France with a French family during the summer. In addition to reinforcing linguistic skills, this is a culturally enriching experience. One student spoke enthusiastically about her experience in Paris. This portion of the program, however, requires parental financial support.

Speech and debate are also part of the seventh- and eighth-grade curriculum. The speech classes require demonstrations that emphasize public speaking skills. For example, in one class a student showed how to make French fries.

Eighth-grade students also have the chance to participate in an archaeological dig under the supervision of the archaeological staff from a local university. They use metric measurements to record observations and findings at the site. Students plot the artifacts on graphs and sift the soil through half-inch mesh screen to catch pottery shards and other fragments. Classroom preparation for the field school is required. Courses include archaeology, anthropology, and time measurement. In one class, students measured and plotted simulated archaeological findings to prepare for the field school. Students worked in teams, cross-checking each other's work and striving for accuracy. In addition, they take an introductory research course that orients them to the scientific approach, including research concepts and techniques, and that culminates in a research paper. Students in the gifted program have made the school a successful competitor in the Junior Academy of Science State Expositions.

On-site observations and interviews documented a match between program goals and actual performance, including engaging and challenging gifted and talented students in a high ability and high achievement model program, preparing students for participation in a foreign language immersion experience, preparing students to enter

second- and third-year language training in high school, preparing students for and participating in an archeological dig, and competing in the Junior Academic Science State Exposition.

Verbatim Quotations

Data collection is an ongoing process in an evaluation. A valuable and often overlooked form of data is the verbatim quotation. They provide the insiders' perspectives in their own language. In an evaluation report, they allow the reader or reviewer of the evaluation to look at some of the raw data. Verbatim quotations from program participants have a tremendous face validity. These data are strengthened by cross-checking and comparing the data with other sources. However, verbatim quotations furnish a valuable data source for analysis and, as part of a report, bring the evaluator's findings alive. The following excerpt illustrates effective use of verbatim quotations in an evaluation report, reviewing educational leadership in the program, teacher and staff member commitment, curriculum, and program climate.

The evaluation found that the principal provides strong educational leadership and is respected by program teachers, students, and parents. He is also viewed as a supportive individual. As one parent explained:

> *I think John is an asset for this school. He is very pro students and he is good for this program. And to me, what impressed me was something my daughter said. She said she was just impressed they could just talk to him just, you know, like an average person. She said, "Mom, I could never do that at the other school!" I thought that was important for them to feel that they could go to John for anything. You're very apprehensive about what you do in school but if you have that fear gone, you feel you are comfortable.*

The teachers in this program are dedicated and innovative educators, sensitive to the needs of gifted children. One seventh-grade student explained that these teachers "know more and they know a better way to teach it [the subject matter] so it's mostly fun and interesting." An award-winning math teacher in the program provided an insight into this student's comments: "I give...lots of brain-teaser kinds of problems. I'd say 50 percent of the kids will devour those and ask for more....Once you get a kid to realize he has much greater potential than he ever imagined—then you've got him." Teachers design programs of instruction that address individual student differences. They often find a sharp contrast between teaching in the regular school program and in the gifted program, as one teacher remarked: "When I first started teaching [in the district] it was almost like pulling teeth. And now [in the gifted program], I'm almost running to stay in front of them."

The curriculum for gifted students is presented in a coherent and consistent fashion. One parent who has a number of her children in the program gave her explanation for this success: "The reason I think it is a strong program is because they have clear, well-defined goals and their selection process is directly related to those goals." Organizational skills are reinforced in all classrooms. Qualities such as self-directedness and individual responsibility are encouraged, and teachers attempt to instill a sense of social concern in their students. As one teacher explained, "I would hope that I would give them some real values to use right along with their tremendous talents, so that they are of some benefit to mankind, not a detriment." Students are enthusiastic and competitive learners, as well as peer educators and resources.

The school climate is conducive to the pursuit of advanced education. Like most gifted programs, this program had few discipline problems and no graffiti on the school walls. Students take pride in their school. One graduate of the program, currently a senior in college, shared his feelings in a letter to the principal:

> *Today I received a letter from home that included an article about [the Gifted Program]. It was a fascinating piece to read—I wish I could be back at the program. It really made me think about what sort of benefits I got from the district.*
>
> *I liked being in the gifted program —regular school was boring. It's hard to forget the experiences of third grade at my [regular] home school. For example, if the class was working on homework and a student finished his work early, he was to select a book from the class library, read it, and write a book report on it. While I like reading books and didn't mind too much having to write the reports, after a while it became almost punitive to have to read and have to write just because I had worked too fast. That "enforced privilege" became an incentive to slow down and try to waste some time. There was another incident when my "Great Books" group returned to class to find ourselves placed on a panel to answer history questions thought up by other students while we were away. There's nothing wrong with a pop quiz, but being expected to show publicly how well we knew or didn't know history was both terrifying and embarrassing. That sort of situation leads to an attitude on the part of the other students (and even the teacher) of "You're so smart - so you tell us the answers?" That year our classes were composed of students of all ability levels, which I think was a terrible mistake. Third graders were supposed to learn the multiplication tables up to ten, but my group didn't even make it halfway through. My family had to teach them to me during the summer between third and fourth grade, when I entered the gifted program.*
>
> *Entering the program was hard—a friend from [his home school] took my decision to go as a personal attack on her. At [my home school] we faced a lot of hostility on the playground from the other students. We were always "different" and "outsiders." Switching to [the Gifted Program] was great because we could finally enjoy school. The teachers were interested in us, and there was no peer pressure to slow down and be average—in fact, doing well was encouraged and respected.*
>
> *I really envy the kids who go to [the program] today. They get to work with a microcomputer, learn archaeology at a real "dig," and benefit from the added experience of the teachers who have worked in the program for a while. The chance to learn a foreign language in grade school has been invaluable in more ways than one. Mastering grammatical terms and structures then has helped immensely in writing papers now. Even if my theme isn't clear, at least the form is great! I've been studying French in college, and it seems incredibly easy after German. Special programs like foreign language were both fun and rewarding.*
>
> *I noticed that the class of [recent graduates] interviewed by the local newspaper mentioned [the Program's] freedom quite frequently as having been important to them. It was important to me, too. Being treated as a responsible person was a great privilege that I didn't appreciate until high school. I never did get used to showing hall passes to security guards or being a "number" in a PE class.*

Students are encouraged to explore their own interests on the same intellectual plane. As one parent who had one child in the program and one in the regular school system elaborated:

> *I think the kids get more encouragement here [in the gifted program]. To achieve maybe higher than where they are. You know, I think they have the attitude that okay, the child may look and say this is difficult but I think the teachers encourage them to try it anyway. I think they have the freedom —more freedom to do it here because of the level; they don't have to split their time between the child who may be just, you know, not so much a slow learner, but he just is not at this person's level. You're holding back and so this way I think everybody can almost work at their own level without holding back someone else. That's what I like about the program.*

This facet of the program is also appreciated by students. One seventh-grade student compared the program with her old school:

> *[At the old school] some kids are faster and they get their work done better and some of them are slower and some couldn't do it and you had to wait for them....You just had to sit there and be quiet....This school is better. You switch classes—which means you have a teacher that specializes in special subjects so they can spend more time on that subject. They don't spend 15 minutes on math and you just do the assignment. You are spending a whole 45 minute period on one subject. So I understand it better.*

A number of students display exceptional talent through individual efforts. For example one thirteen-year-old student's software programming accomplishments for a Silicon Valley firm have been publicized on ABC's "Good Morning, America" show. Group efforts are also common. School spirit and camaraderie are evident in group classroom projects and extracurricular activities. Many of the gifted children in the program are also successful athletes in various sports.

Concern for the student's development extends outside the classroom. One parent explained how "these teachers are very supportive of sports activities," as evidenced by their routine attendance at both scrimmages and official games. One parent describes the degree of parental involvement in the support system of the program:

> *Interviewer: Do you notice a difference [from the regular school system] in terms of parental involvement in the gifted program?*
>
> *Parent: (laughter) That's an understatement. You should have been here last night...[at a parent's night]. It was standing room only. There were over 300 parents. Okay, now this week at my children's other [regular] school, I will go and there will be maybe 100 parents. I mean it's definitely that much of a difference.*

Parents share their appreciation of the Gifted Program with school administrators at graduation. In one letter, a parent wrote the following to the principal:

> *We wish to express our appreciation of the support given to [our daughter] by you and the staff. Contrast the happy, excited, and confident teenager who completed eighth grade last week with the discouraged and despondent fifth grader who was the subject of intense peer harassment and derision three years ago and you can understand our appreciation. Your*

> *judicious actions and the staff's interested involvement undoubtedly had much to do with making [our daughter's] elementary years rewarding. She was fortunate to have the type of challenge, guidance, encouragement, and opportunity for independent development that the program provides. For all these professional benefits we are truly thankful.*

Another parent's letter communicated similar sentiments:

> *In a nutshell, [the Gifted Program] has let the sun shine in. My daughter always liked school, always did well, always seemed content. Now, however, school is pure joy. The change in her is striking and only proves to me how unwittingly we ignore the needs and potential of many students because they make it so easy for us to do so. In fact, we are no doubt allowing untold numbers of youngsters to slide along at a reduced pace because we are unwilling to raise our expectations. If I could have one educational wish..., it would be that more of them could experience the sunshine that my daughter has found. Thanks for a super program.*

The verbatim quotations in this selection provide an insight into the relationship between the principal, teachers, students, and parents. In addition, they show support for stated program goals and objectives, including committed staff members, involved parents, and a school climate conducive to advanced education. Retrospective and reflective verbatim quotations from a graduate of the program are useful in many respects. A testimonial from a graduate of the program is a positive indicator of program impact. (It is only one piece of data. However, as part of a cluster of positive indicators emerging from a variety of sources, it contributes to a strong and compelling finding.) In addition, a program graduate can provide additional information by comparing the program with the regular system, enabling the reader or reviewer to view the program in a larger context. Similarly, a parent with one child in the gifted program and another in the regular program can provide excellent comparative insights into the program. Such comparisons demonstrate the full value of teacher commitment and parental involvement in the gifted program.

Assessment and Analysis

Evaluations should document program elements that are working effectively, as well as those that are ineffective or counter-productive. The evaluation of the gifted and talented program concluded that the district had designed a gifted education instructional program in response to the educational needs of students with both general intellectual ability and specific aptitude. In addition, the program's strength and community support were unquestionable. However, evaluations rarely find a program in perfect working order. In fact, typically evaluations err on the side of reporting problems that need to be addressed. This evaluation identified and documented numerous problems. The district did have areas that needed innovation and improvement. Its service to gifted children between junior high school and college needed to be strengthened. The evaluation also determined that underachieving gifted children were not served and recommended extending the program to include those students. It also recommended a mentor program and emphasized the need to collect and maintain follow-up data on graduates. These findings were based on interviews, observations, and a review of testing data in the district.

The Mechanisms

Once the value of the program had been established, an analysis of the referral, identification, and selection mechanisms was warranted. These are classic elements of any gifted and talented program evaluation that merit attention. This facet of an evaluation requires interviews with principals, gifted coordinators, school psychologists, and parents. In addition, a review of the documentation associated with the referral, identification, and selection process is required, including individual scoring sheets, students files, and related district records. This section of the case study also highlights the value of outside experts concerning technical issues.

The mechanisms themselves were found to be standard. On the basis of districtwide intelligence and achievement test results and teacher and principal nominations, students were referred to a neighboring university for individual intelligence testing. A selection committee screens candidates through a predetermined formula consisting of the Wechsler Intelligence Scales for Children-Revised (WISC-R) (39.65 percent), the Cognitive Abilities Test (CAT) (19.07 percent), the SRA Achievement Series (SRA) (16.09 percent), grades (15.14 percent), narrative (5.63 percent), and the Characteristics Rating Form (4.42 percent). Students are ranked according to an overall score based on this formula. The top sixty students are selected for participation in the gifted program. Periodically, students are selected to fill vacancies at various grade levels.

The evaluation found that the Hartland School District is adhering to the State Board of Education's rules, regulations, and guidelines governing the identification and selection process of gifted education reimbursement programs. Criteria for selection have been described in detail and consistently applied to children in the local educational agency population.

The district exceeds the state standards regarding the use of identification devices. The state requires a minimum of three identification devices and lists suggested methods for the district to use in identifying gifted children. The district has selected five methods from the state's list: the WISC-R (intelligence test), the SRA (achievement test), teacher recommendation, past grades (past performance), and individual rating sheets. In addition, the CAT is used. Identification criteria are established before students are selected for the program, and specific cut-off scores are adopted when standardized tests are used. A direct relationship exists between the criteria for selection and the instructional program for gifted students.

All gifted program teachers are certified and are required to meet two of the three state requirements. They must all have attended a summer training institute approved by the Office of the Superintendent of Public Instruction for teachers of the gifted, and have had at least two years (some as many as eighteen years) of experience working with gifted programs. This component of the evaluation shifts from process and outcome description to accountability in an almost audit compliance fashion, highlighting the multifaceted nature of program evaluation.

Refinements

Evaluations, particularly formative evaluations,[16] are designed to improve the program during the evaluation. This is particularly important in cases where a significant problem has already been identified and is the focus of the evaluation. In this evaluation, numerous refinements or recommendations were made in memoranda throughout the

evaluation and compiled (with school district responses) in the final report. Some of the recommendations to refine the program operation follow.

Although the district met or surpassed state requirements, a review of the specific referral, identification, and selection mechanisms in practice suggested that refinements were needed. Viewing each mechanism as a gatekeeping function highlighted the significance of each problem and the nature of the necessary refinement.

For a student, referral is the first door into the gifted program. The district has three referral pools. The first is composed of third-grade students who score at the 80th percentile or above on districtwide CAT and SRA tests. The second pool consists of students who may have missed one of the tests by being absent, and the third pool includes individual teacher or principal nominations. Referral statistics indicated that only nine black students were referred to the district gifted program—four from the first pool and five from the third. Only two students were referred from five predominantly black schools in the district. One black parent explained, "I have heard from others that sometimes the teachers don't recommend the students, and it's not so much that it's because they are black, but...that some of the principals want to have those high achievers at their schools." In other cases, the parent explained that low teacher expectations were a problem:

> *The teachers walk into the school. Nothing is expected of them. They walk in and say, "All right, look at this address, where is he from? Okay, I know he is not going to be able to do this. I'm not going to spend that much time if he does not get it right away; I'm not going to spend that much time with him. Label him learning disabled or slow learner...." It's just so sad they feel like no one wants to teach down there. "Oh, it's boring, I can't teach those kids." They just feel they can't learn, but if they noticed, if they give these kids a little extra attention, a little encouragement, they would do well.*

The number of minority students in the program can increase only if the pools of minority applicants increase. The evaluation pointed to the problem of teacher expectations and the need to conduct in-service training programs in identification and referral procedures, particularly in schools that had not referred any students to the gifted program. The evaluation recommended that teachers with the greatest predictive ability (on the basis of past performance) should help develop and conduct in-service training programs. Although it would not guarantee increased selection, such a program would be a first step toward refining the district's procedures and instruments. Increasing the pool of potentially qualified applicants is a necessary yet insufficient baseline.

Identification procedures are a second door to the program. Clark (1979) and Getzels and Dillon (1973), among others, emphasize the role of identification methods in explaining underrepresentation. The gifted and talented program had to make several modifications to answer political, pragmatic, and technical concerns. The selection committee members responsible for reviewing student tests and documents all belonged to the same school. Other schools had no representative on the committee to serve as a potential quality control and political advocate. The evaluation recommended that the district consider appointing a representative to the committee from the southern, predominately minority schools.

A second problem involved the Characteristics Rating Form, one of the instruments to identify gifted children in the district. The form was out of date and lacked internal consistency. For example, some questions juxtaposed a "poor" rating response

with a "better than a good many" rating response. An updated list of behavioral characteristics was shared with the district to enable it to modify and improve the selection process. (See Davis & Rimm, 1985; Renzulli & Hartman, 1971; Tuttle & Becker, 1980 for a useful collection of behavioral characteristics checklists.)

A third problem concerned the districtwide tests. The WISC-R, SRA, and CAT are acceptable and appropriate tests for a gifted program oriented toward high ability and high achievement. (See Hagen, 1980, regarding the value of the WISC-R and the CAT.) A review of the district achievement test score sheets revealed no significant problem, but a minor mechanical problem did emerge. The pencil quality of recorded answers was inconsistent, which suggested that optical scoring might be affected. Such an observation seems trivial, but in a similar case the consequences were significant (Breckenridge 1984):

> *Hillsborough County, Florida, public-school officials have pinpointed faulty pencils as the reason a computer misread 10,500 answer sheets for a basic-skills test taken by 85,000 students earlier this year.*
>
> *Administrators estimate it will cost $40,000 and take 26 days to rescore all 85,000 tests. (p. 7)*

In an investigative-evaluation of this type, all levels, including abstract and mechanical, must be explored. Low-graphite pencils may be used disproportionately by one segment of the population. In addition, sections of individual (SRA) score sheets were completely blank. The evaluation emphasized that this finding indicated a need for additional analysis. Further study would enable any school district to determine the frequency of the problem and any correlation with specific teachers, schools, or populations.

A more substantive problem involved the CAT. One of the cut-off scores for the first pool of students (Category I referral) was based on the CAT. The lowest score was selected from the verbal, nonverbal, and quantitative elements of the test. The evaluation demonstrated how a higher measure of consistency could be achieved by selecting a single element for all students, assuming students meet an established standard on each of the CAT subtests. (The quantitative subtest appears to be the best predictor at the middle and secondary school levels.) This refinement may improve the accuracy of the match between the type of student (verbal, nonverbal, and/or quantitative ability) and the program curriculum.

As Hagen (personal communication 1985) points out, "It is extremely important that the selection process for gifted programs should be closely related to the cognitive, academic, and other demands that the program makes on students." In addition, the evaluation recommended the use of raw scores or scaled scores rather than percentiles in determining this facet of a student's eligibility for the program. Score averaging was also discussed. Hagen (personal communication 1985) strongly recommends that "Standard Age scores be used for selection, particularly if the selection procedure involves averaging two or more of the scores. Whenever averages of two or more of the test scores are used for selection, it is important to remember that a distribution of averages is typically less variable than the scores used to compute the average." The evaluation also noted one deviation from the conventional administration of the WISC-R: Students did not receive the vocabulary section of the test, which is the greatest predictor of achievement. Although this practice does not compromise the test validity or reliability because the four remaining subtests are averaged (see Wechsler 1974, Appendix E, p. 190), it does represent a different approach. Before the evaluation was

completed, the district research director requested that the vocabulary section be administered in the future.

A more technical recommendation involved the weighting system. The following weights were given to each variable in determining the ranking score of the students: WISC-R, 39.65 percent; CAT, 19.07 percent; SRA, 16.09 percent; grades, 15.14 percent; narrative 5.63 percent; and Characteristics Rating Form, 4.42 percent. Straight percentages, however, can give additional weight to IQ scores.

The evaluation suggested a refinement to improve the accuracy of the weighting mechanism. Briefly, instead of using straight percentages for each variable, percentages could be divided by the standard deviation of the group. This refinement would further increase the accuracy of the measurement by distributing these student scores on the basis of the gifted population scores (for further details, see Guilford, 1956). The evaluation also suggested that SRA raw scores could be used instead of percentiles. Adopting growth-scale values would at least represent an improvement on the use of percentiles. Raw scores can convert to normal curve equivalents (NCEs) to increase the accuracy of the measurement.

A final recommendation involved rank-ordering students eligible for a replacement slot. Periodically, students left the program, either by choice or necessity. Potential replacements, however, were not sequentially ranked according to their total scores. This practice, which was unfair to students and their parents and inconsistent with program procedures, was also a significant political liability. Politically pressured district administrators may have appreciated the latitude or discretion this loophole offered, but the small amount of discretionary power they gained was insignificant compared with the charges of preferential treatment they face.

Overall, the evaluation concluded that district referral, identification, and selection systems were appropriate given the program's model of high ability and high achievement. Suggestions and refinements to improve the accuracy of the existing system were often geared toward enhancing the probability of increased minority representation. However, these fundamental mechanisms clearly were not the most significant cause of low minority representation in the program. The major underlying factors lay in the community, not in the school.

Analyzing Underlying Factors: Socioeconomic Context of Minority Representation

Evaluators need to persevere when a review of standard program components fails to provide a useful insight into program operations. Evaluators should exhaust all useful and realistic data sources whenever possible. This excerpt emphasizes the need to look outside the school and into the community to understand the larger dynamics operating in a gifted and talented program. It also highlights the value of archival data such as census data to meaningfully interpret the enrollment data in context. This portion of the evaluation also relied on interviews with educational administrators, teachers, and black, white, and Asian parents in the community. Memoranda on this topic were useful to validate my preliminary findings with major stakeholders in the district and the community.

The state was primarily concerned about black student representation in the district's gifted program. Pertinent socioeconomic data were used to explain the disproportionately low black student enrollment in the program.

In the district, white students comprised 60% of the third grade and 55 of 737 white students (7.5%) were selected to participate in the gifted and talented program. Given their size in the school population, Asians were the most over-represented group in the program. Asians constituted 2% of the third-grade enrollment. However, in 1984, 3 of 26 Asian students (12%) were selected to participate in the gifted program. In contrast, 2 of 475 black students (.4%) were selected to participate. Clearly, blacks were statistically underrepresented in the program. Similar patterns of under- and overrepresentation, resulting from social variables, are common in gifted programs.

Like most communities, Hartland is not socioeconomically homogeneous. Approximately 72% of the black population lives in the poorer, southern section of town. The southern section has by far the highest unemployment rate, the highest rate of female heads of household with children and, conversely, the lowest rate of husband-wife households. The southern section has the lowest income and educational achievement levels in the community. It also has the highest percent of renters and the highest rate of vacant commercial units. Neighborhood housing has severely deteriorated.

In contrast, the middle and northern sections of Hartland are predominately white (74%). These sections of the community enjoy average to very low unemployment rates and the highest rate of husband-wife households. They also have the highest incomes and educational levels in the community. The middle and northern sections of the town have the highest percentages of home owners, few vacant commercial units, and neighborhood housing in good to excellent conditions.

According to the 1980 U.S. census (U.S. Department of Commerce, issued in 1983), the median income for whites was $19,192 and $12,063 for blacks. Thirty-four percent of working whites were employed in technical, sales, and administrative support occupations; 23% of employed blacks worked at this socioeconomic level. As one proceeded up the employment ladder, the discrepancy between blacks and whites increased. Twenty-eight percent of employed whites had jobs in managerial and professional specialty occupations—16% in the professional category. In contrast, only 13% of employed blacks worked in this economic group—9% in the professional fields. Similarly, 29.5% of the black population lived below the poverty line, compared with 5.6% of the white population.

Gifted enrollment statistics are a product of societal forces outside the classroom. These socioeconomic variables strongly influence this gifted program's enrollment statistics (see Barbe, 1956, regarding socioeconomic variables). Given such significant socioeconomic differences in Hartland, disproportionate representation in a high ability/high achievement program is not surprising. A plethora of social forces inhibit proper academic preparation of blacks in Hartland, ranging from low incomes to insufficient educational background. Conversely, white families in Hartland have the advantage of higher incomes and better educational backgrounds than blacks.

The evaluation had to take the sociocultural variables into account when evaluating program enrollment statistics. In an ideal world in which all students share the advantages of a supportive, enriched background, IQ scores would have more meaning and proportional representation could be expected. Hartland's vast socioeconomic differences, however, make such expectations unrealistic.

Addressing Larger Sociopolitical Concerns: Quota Systems and Equality of Results

Evaluations often address larger social and political concerns beyond the program. They should be considered secondary or supplementary to a focus on the program.

Larger issues should not consume more resources or space in the report than program concerns. However, they should not be neglected when relevant. This evaluation highlighted a problem common to many gifted and talented programs in the United States and had direct programmatic implications. This portion of the evaluation required experience in the field, knowledge of the equity literature, and knowledge about the State Board of Education's position—based on governmental archival material, interviews with government officials, and newspaper articles, as well as interviews with program participants.

Problems of unequal representation are often addressed by imposing a quota, making proportional enrollment a legislative process. In Hartland, the district faces State Board of Education pressures to establish greater minority representation in its gifted program. A quota system would produce proportional representation and be politically expedient. However, a simple percentage quota system—unrelated to existing criteria—would have significant and potentially deleterious effects on the program and on district enrollment.

Hartland's program is designed for high-ability and high-achieving students. This model serves motivated, goal- and achievement-oriented students with high intellectual potential. Funds limited the program to sixty students. Such fiscal constraints already cause a loss of district enrollment; many eligible students (not included in the sixty selected) are lost to private schools.

The larger mission of the gifted program is also at issue. Hartland's program is, by its nature, designed to meet the needs of children at the margins of intellectual distribution. Implementing a quota system redefines the term gifted and equates equal opportunity with equal ability —an egalitarian fallacy. Applying a simple percentage quota system, unrelated to existing selection criteria, to a gifted program makes no more sense than applying such a system to an athletic team. The purpose of the program in Hartland is to select and serve children with specific intellectual and motivational needs and qualities. Students having the highest predictive criteria performance should be selected. These criteria for program selection should be based on statistical measures supplemented by more subjective measures.

At the same time, scores must be viewed realistically. The difference between an IQ score of 130 and one of 128 is academic. The child who scores 128 will, in all probability, perform as well as the student who scores 130. Comparing scores is much like comparing stereo specifications. The difference between a receiver that has a range of 20 to 20,000 MHz and a receiver that has a range of 17 to 25,000 MHz is extremely small, given that the human ear can only hear between 20 and 20,000 MHz. Similarly, a quota system that selects for minority status within an acceptably high ability and achievement range need not require perfect numerical comparability with competing students. Such an approach would not undermine the program.

The faulty equation of equal opportunity with equal ability is followed by an equally misleading equation —that of equal opportunity with equal achievement or results.

> *One intellectually important consequence of the Coleman inquiry into educational inequalities was that concepts of equality began to polarize around two dominant principles: one was the old traditional value of equality of opportunity, but the other was the newly appreciated—if not newly conceived—idea of equality of results....as Coleman clearly perceived, when equal results were achieved in academic records it did not follow as a matter of course that*

they sprang from equality of conditions in the schools. Beyond this difficulty, the somewhat crude results thrown up by test scores and other school records could too easily be transmuted from methods of measurement into educational aims. When the aim of the schools was to achieve an equality of recorded measurement the system might be in working order, but some doubt would arise as to whether it was a system of education. Educational specialists would find nothing to surprise them in this problem. Its most acute form had long afflicted America's more gifted children, frequently held back from anything like their full potentialities by the stubborn pace of satisfied mediocrity. When quality meant equal opportunity for each child to develop fully his or her own potential, it could not be easily reconciled with the view of equality which aimed to produce a steady stream of similar products and failed to offer the incentive, the equipment, or the intelligence needed by children of innately superior abilities. (Pole, 1978, p. 352)

The issues of equal opportunity, ability, and achievement or results can have a profound effect on the operation of gifted education programs. These basic philosophical concerns, as well as pragmatic and political concerns, must be addressed before any alteration of a program's existing model is undertaken.

Evaluation Findings, Reports, and Recommendations and the Public

The test of an evaluation is often in the findings and recommendations —which are presented in the form of a report. Highly publicized evaluation findings and recommendations adds a qualitatively different level of difficulty to the effort. Difficulties can be minimized by following normal evaluation procedures including cross-checking findings and sharing preliminary findings with key stakeholders with memoranda and interim reports. The press operates independently of an evaluation. However, they can pressure program officials to implement recommendations and ensure continued accountability.

The evaluation's findings were presented to the school board in a controversial and highly publicized atmosphere, reflecting the political tensions that ran through the entire study. Three television channels and a handful of newspaper and radio reporters covered the affair. Cameras were rolling; floodlights and microphones were everywhere. The board heard a point-by-point report and then explored specific points in greater detail and asked for additional suggestions. At the subsequent press conference, some reporters pressed for a vindication of the city. Others viewed this occasion as an opportunity to strengthen the state's case.

Predictably, television coverage presented as many interpretations of the evaluation report as there were reporters. One anchorman reported that the Stanford researcher had given the program a "gold seal." Another anchorwoman reported "mixed findings" by the Stanford professor. A third reporter emphasized the socioeconomic factors discussed in the report. One paper emphasized the evaluation recommendations regarding the weighting system for tests to select students and the warning that teachers too often have low expectations of black children. This variation in interpretation is one of the reasons I emphasize the need to produce an evaluation report. Verbal communications are often lost or modified intentionally and unintentionally. In addition, a report enables everyone to have the same information. It also enables everyone to return to the written word in case of disputes.

For its part, the district considered each finding and recommendation on its own merits. The district made more than twenty-three program changes based on the evaluation recommendations.

Some of the changes include having a representative from schools, which have a higher percentage of blacks on the selection committee for the program; training teachers in schools where few or no students have been referred to the program to recognize gifted students; establishing quality controls on the system used to select students; and developing a more definitive process for ranking students for selection.

The board president sent a copy of the report and program changes to the state superintendent of education to resolve Hartland's ongoing conflict. The district agreed to increase the pool of minority applicants. However, the director of research recognized that "increasing the pool of minority students in the referral group will not necessarily increase the number of minorities selected as long as the program is maintained at its original intent and present purpose."

According to the district's research director, "they wanted an academically gifted program for children with high ability who have proven academic achievement." Each community selects the type of program it believes to be most advantageous for its children. As Whitmore (1980) points out, "Methods of identification are determined by the goals of the program for which students are being selected" (p. 19). Hartland's model is highly selective and is only one of many excellent gifted and talented program models.

Some programs have broken Hartland's criteria into separate parts for selection consideration: high achievement for one group and high ability for another. Using the high-achievement category alone and lowering IQ standards for economically disenfranchised students has been successful in increasing minority enrollment in other districts. However, a different kind of program is needed to accommodate students selected under these arrangements. Moreover, some difficulties with retention have arisen with this selection system. A program that places greater emphasis on talents and creativity than on academic giftedness would probably increase minority representation. Such a focus would, however, require redesigning the program structure and curriculum as well as staff configuration.

The Hartland program evaluation was a test case for a basic problem in gifted education programs throughout the country. The evaluation of Hartland's program demonstrated that problems in the classroom often spring from the local community (see also Tannenbaum 1983, p. 353). Program and community variables must be thoroughly evaluated before conclusions about a district are made. Since schools often reflect societal forces, inequities in the community will create inequities in its schools. To accuse the schools and school programs of being the sole cause of such problems is an example of blaming the victim (see Fetterman, 1981).

All useful evaluations will have a focal point, a set of goals, outcomes, or concerns that shape the effort. Most evaluations will require the type of detailed program description provided in this presentation, as well as a description of the program processes and effects. Many will confront technical issues. Few evaluations will require such a thorough examination of larger social and political issues in education. However, all evaluations have the potential of grappling with controversial issues of this scope and significance and in the public forum.

Concluding Thoughts

Evaluation is essential to learn how a gifted program works, how effective programs are, and how to raise their standards of quality. Self-evaluations should be a routine part of daily program activity. Students, teachers, administrators, and parents should be encouraged to conduct informal self-appraisals on a daily or at least weekly basis, questioning and comparing what students are doing in relation to stated program goals and objectives. Systems should be developed and implemented to give regular feedback to students, teachers, administrators, and parents, including parent-teacher conferences, faculty meetings, and student performance conferences.

External and independent evaluations complement self-evaluations by ensuring a more objective and credible appraisal. Formative evaluations provide a continual flow of information to program officials throughout a review to improve program practice. Summative[17] evaluations can enhance formative evaluations by providing additional knowledge with a focus on policy decision making. External evaluations, whether qualitative or quantitative, formative or summative can improve program practice and student performance. Independent evaluations also help to establish the utility of such approaches in gifted education as acceleration, enrichment, and special group settings. They are also more credible to sponsors and outside agencies, particularly concerning sensitive or controversial issues.

Nearly all programs can be improved by a critical review. If unexamined, the health and well-being of gifted and talented children and the future of the nation are at risk. Together, these approaches play an essential part in the development, maintenance, and understanding of educational programs for the gifted and talented.

General Evaluation Guidelines

Guideline One: Make sure the evaluation serves the practical information needed by the targeted audiences.

Take time to identify who the key stakeholders are including administrators, parents, teachers, and students. Find out what they want to know and then develop a plan to address the most salient concerns.

Guideline Two: Make sure the evaluation is realistic (politically and pragmatically) and cost effective.

There is no point in conducting an evaluation if there is no political support for a program or if there is good reason to believe the findings will be hidden or altered. Care must also be taken to ensure that an evaluation effort does not significantly drain program resources.

Guideline Three: Make sure the evaluation is conducted in an ethical manner.

The rights of program participants must be protected. Care should be taken to ensure privacy, freedom of information, and confidentiality (if promised).

Guideline Four: Make sure the evaluation is as accurate as possible.

Take the time to seek out various sources of information and cross-check data sources. Double check all figures and interview notes. Judgments about the data should be logical and reviewed by independent sources whenever possible.

For a more detailed discussion of evaluation standards and guidelines see *The Program Evaluation Standards* by the Joint Committee on Standards for Educational Evaluation (1992) and Rossi's *Standards for Evaluation Practice* (1982).

Specific Guidelines for Evaluating Gifted and Talented Education Programs

Guideline One: Make sure program documentation exists.

Program documentation should describe the program's philosophy; curriculum; staffing; financial, library, and computer resources; identification and screening procedures; and selection criteria. In addition, classroom schedules and maps of the physical layout will facilitate any evaluation.

Guideline Two: Make sure you review as many relevant data sources as possible.

Interviews and observations are critical. In addition, archival documentation, such as newsletters, financial reports, student letters, parent letters, past evaluation reports, newspaper articles, and many other documents provide pertinent data about the program's impact and role in the community.

Guideline Three: Make sure you compare the program's stated goals with their actual performance.

Does the program operate in accordance with its own philosophy (academically and in terms of governance)? Does the curriculum reflect the philosophy and goals of the school? Do the staff members appear to understand and implement the stated program philosophy? How do teachers translate the program's philosophy into practice in their teaching?

Guideline Four: Make sure you describe and assess the climate.

Are students engaged? Are teachers stimulating, thoughtful, and knowledgeable? Is communication between staff and administration constructive and cooperative or antagonistic and fragmented? Similarly, what is the nature and tone of communication with and among students.

Guideline Five: Make sure you talk to students.

The purpose of gifted and talented education programs is to serve students. Time should be devoted to informally interview students about their own progress (including a review of their portfolio, records, or projects) and their evaluation of the program. Student academic achievement and behavior code data are critical to any gifted and talented education program evaluation.

Guideline Six: Make sure program finances are reviewed.

Is the program budget sufficient, if not, why not? Is the money being used as intended, if not, why not? Is financial program planning adequate and appropriate to meet the needs of the program in the foreseeable future?

Guideline Seven: Make sure community and school board components are included in the evaluation.

Do community and school board members support the program? What is the evidence? Do parents participate in the program? What are the obstacles to community and board support if any?

Notes

[1] This discussion is informed by the definition of giftedness in the Jacob K. Javits Gifted and Talented Students Education Act of 1988.

[2] During my presidency of the American Evaluation Association, I created an evaluation approach called empowerment evaluation. This approach involves using evaluation to help others help themselves. One facet involves encouraging program participants to conduct their own evaluations by sharing useful models and concepts that help them look at themselves critically.

[3] Triangulation is both a conceptual orientation to guide inquiry and a technique for testing data in the field.

[4] Construct and predictive validity are two of the most critical features of a measure. Construct validity is concerned with whether the measure accurately represents the concept measured. Predictive validity is concerned with the power of the measure to predict future behavior or outcomes.

[5] There are many intended as well as unintended outcomes in a program. A descriptive approach focusing on the insider's perspective enables the evaluator to capture and document these outcomes. Ethnographic approaches are sensitive to outcomes that are not an explicit part of the program design, such as the leveling out process that occurs when a gifted child is grouped together with other gifted children and recognizes she is not the only bright child in the world.

[6] In one evaluation, student attendance was poor and teachers were inactive. Normally this would have resulted in a poor assessment. However, I probed and found that the sponsors did not support the program financially, preventing teachers from purchasing supplies required to conduct the most basic educational activities. Failure to probe would have resulted in a misevaluation. See Fetterman, 1981 for an example of blaming the victim.

[7] Triangulation is an instrumental tool to compare policy positions and actual program practice. In one evaluation, the policy stated that the "best teachers would be selected" based on superior teaching. Closer inspection revealed that teachers were selected according to seniority. The match proved less than optimal when the regular classroom teacher confronted the realities of educating challenging gifted and talented children. In this case, the interpretation and implementation of policy, rather than the policy itself, had a negative impact on the program.

[8] Participation is similar to but different from collaboration. Collaboration requires participation but takes one step beyond it. Collaboration requires the active participation of program participants in the study design, data collection, analysis, and report of findings. Collaboration and independence are not mutually exclusive. However, additional safeguards are warranted when a collaborative study is conducted.

[9] For example, a student with high IQ scores (intellectual potential) and low standardized achievement scores is probably an underachiever.

Notes *(continued)*

[10] A high IQ and high achievement test scores in mathematics probably should not be the driving criteria in the selection of students for a gifted and talented visual and performing arts program.

[11] In most psychometrically oriented approaches only the outcomes are revealed—process data are required to link the outcomes to specific program treatments.

[12] David Irvine, New York State Department of Education, Gifted Education Coordinator, has been an early, creative, and strong proponent of this approach.

[13] There are numerous problems with the use of standardized test scores with gifted and talented children, including regression toward the mean and ceiling effects. (See Thorndike & Hagen, 1969; Sattler, 1982 for additional discussion about these issues.) However, such test scores can be used to document change over time in student performance, particularly for underachievers and students from culturally diverse backgrounds. In addition, the use of appropriate standardized tests on which gifted students score around the mean might avoid some of the problems noted above.

[14] The works of Carter, Feldhusen, and Robinson also merit attention.

[15] There are many evaluation approaches that merit attention. For additional insight into different evaluation approaches, see Alkin et al, 1979; Campbell & Stanley, 1966; Cronbach, 1980; Rossi & Freeman, 1989; Scriven, 1972; Stufflebeam, 1971; Stake, 1975; Patton, 1990; Provus, 1969.

[16] Scriven refers to formative evaluation as evaluation aimed at the improvement of an ongoing enterprise (see Davis, Scriven, & Thomas, 1981).

[17] According to Davis, Scriven, and Thomas (1981), summative evaluation is conducted for an external client and its primary purpose is to report on the quality of the program for purposes other than improvement.

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Appendix A

Nonjudgmental Orientation

Some ethnographic concepts push the researcher or evaluator to explore in new directions, others ensure that the data are valid, still others simply prevent contamination of the data. A nonjudgmental orientation helps ethnographic evaluators on all three fronts. Most important, this concept prevents ethnographic evaluators from making inappropriate and unnecessary value judgments about what they observe.

Ethnographers and ethnographic evaluators must attempt to view another culture without making value judgments about unfamiliar practices, but cannot be completely neutral. We are all products of our culture. We have personal beliefs, biases, and individual tastes. Socialization runs deep. However, the ethnographer and ethnographic evaluator can guard against the more obvious biases by making them explicit and by trying to view another culture's practices impartially. Ethnocentric behavior—the imposition of one culture's values and standards on another culture, with the assumption that one is superior to the other—is a fatal error in ethnography.

The label *ethnographic evaluator* suggests a contradiction in terms to some scholars. How can an anthropologist be nonjudgmental and judgmental at the same time? The question provides a handle by means of which we can clarify the role of the ethnographic evaluator.

First, it is a myth that anthropologists are completely nonjudgmental. The selection of a topic itself reflects built-in biases. The process of collecting data requires discrimination and judgment. Analysis and the manner in which findings are skillfully crafted and communicated reveal explicit and implicit biases. The aim, however, is to assume a nonjudgmental orientation toward different cultural practices. Ideally, value judgments are not made about marriage practices such as polygamy, gender-favored inheritance patterns, the lifestyle of a merchant or beggar, or personal hygiene practices. Both traditional ethnographers and ethnographic evaluators attempt to adopt this posture throughout a study and to make explicit their more conscious and obvious biases. A nonjudgmental orientation and an evaluative approach are not mutually exclusive. Evaluation simply represents another level of analysis. The evaluator can assess the functions and adaptations of a system, program, or policy without making a value judgment about the cultural practice per se.

The major difference between the traditional ethnographer and the ethnographic evaluator is that the traditional ethnographer *concludes* the study with a description of the culture, whereas an ethnographic evaluator *begins* the evaluative segment of the study with a description of the culture. The ethnographic evaluator describes what is going on and then makes a qualitative leap beyond description to the explicit appraisal and assessment of the cultural system in terms of its own cultural norms. As an ethnographer and an ethnographic evaluator, I have found explicit assessment to be a more honest and useful approach to the study of human beings. (See Fetterman, 1984a; Fetterman & Pitman, 1986 for a more detailed discussion about the ethnographic evaluator.)

Appendix B

Insider's or Emic Perspective and Multiple Realities

The emic perspective—the insider's or native's perspective of reality - is at the heart of most ethnographic research and ethnographic evaluation. The insider's perception of reality is instrumental to understanding and accurately describing situations and behaviors. Native perceptions may not conform to an "objective" reality, but they help the fieldworker understand why members of the social group do what they do. In contrast to a priori assumptions about how systems work from a simple, linear, logical perspective—which might be completely off-target—ethnography and ethnographic evaluation typically takes a phenomenologically oriented research approach.

An emic perspective compels the recognition and acceptance of multiple realities. Documenting multiple perspectives of reality in a given study is crucial to understanding why people think and act the different ways they do. Differing perceptions of reality can be useful clues to individuals' religious, economic, or political status and can help a researcher understand maladaptive behavior patterns. (See Fetterman, 1989, for a detailed discussion of the emic perspective.)

Appendix C

Triangulation

Triangulation is one of the most basic analytical tools used in ethnographic research and ethnographic evaluation. Triangulation is at the heart of ethnographic validity. It involves testing one source of information against another to effectively strip away other plausible explanations for a hypothesis. Typically, the ethnographer or ethnographic evaluator compares one source of information with another, like a mini-experiment, to test the quality of the information collected (and the person sharing it), to better understand the part an actor plays in the human drama, and ultimately to put the whole thing into some sort of credible perspective.

Triangulation can be used with any topic and in any setting and on any level of that setting. It always improves the quality of data and the accuracy of ethnographic findings. Triangulation can occur naturally in conversation as easily as in intensive investigatory work. However, the ethnographer or ethnographic evaluator must be prepared to identify it when it is happening in subtle contexts. (See Fetterman, 1989; Webb, Campbell, Schwartz, & Sechrest, 1966 for a detailed discussion about triangulation.)

Appendix D

Participant Observation

Participant observation characterizes most ethnographic research, as well as ethnographic evaluation, and is crucial to effective fieldwork. Participant observation combines participation in the lives of the people under study with maintenance of a professional distance that allows adequate observation and recording of data. Powdermaker's *Stranger and Friend* (1966) vividly depicts this delicate role.

Participant observation is immersion in a culture. Ideally, the ethnographer lives and works in the community for six months to a year or more, learning the language and seeing patterns of behavior over time. Long-term residence helps the researcher internalize the basic beliefs, fears, hopes, and expectations of the people under study. The simple, ritualistic behaviors of going to the gifted and talented program seminar room or the lunch room teach how people use their time and space, and how they determine what is precious, sacred, and profane.

The process may seem unsystematic; in the beginning, it is somewhat uncontrolled and haphazard. However, even in the early stages of fieldwork the ethnographer searches out experiences and events as they come to attention. Participant observation sets the stage for more refined techniques—including projective techniques and questionnaires—and becomes more refined itself as the fieldworker understands more and more about the culture. Ideas and behaviors that were only a blur on entering the community take on a sharper focus. Participant observation can also help clarify the results of more refined instruments by providing a baseline of meaning and a way to re-enter the field to explore the context for those (often unexpected) results.

Working with people—day in and day out—for long periods of time is what gives ethnographic research and ethnographic evaluation its validity and vitality. Given time, people forget their company behavior and fall back into familiar patterns of behavior. Ethnographic research in one's own culture may not require as much time to reach this point as ethnographic work in a foreign culture: Language and customs are familiar, and the researcher is already an insider in many respects. However, sometimes a familiar setting is too familiar, and the researcher takes events for granted, leaving important data unnoticed and unrecorded.

In applied settings, participant observation is often noncontinuous, spread out over an extended time. For example, in one large-scale evaluation of a gifted program, I visited the program for only a few weeks every couple of months over a three-year period. The visits were intensive and included classroom observation, nonstop informal interviews, occasional substitute teaching, interaction with community members, and the use of various other research techniques, including long distance phone calls, dinner with student families, and time spent hanging out in the hallways and parking lot with students.

Participant observation requires close long-term contact with the people under study. Often contract research budgets or time schedules do not allow long periods of study—continuous or noncontinuous. In these situations, the researcher can apply ethnographic techniques to the study, but cannot conduct an ethnography. Similarly, observation without participation in other people's lives may involve ethnographic methods, but is not ethnography. Nonparticipant observation may be watching a school basketball game or a Board of Education meeting as part of data collection. Applying

ethnographic techniques and nonparticipant observation are acceptable forms of research, but labeling the research method correctly is important.

The process may seem complicated, but a good ethnographer starts with the basics. Participant observation begins with the first question. Slowly but surely, the questions become more refined as the researcher learns what questions to ask and how to ask them.

In any case, the acquisition of ethnographic knowledge and understanding is a cyclical process. It begins with a panoramic view of the community, closes in to a microscopic focus on details, and then pans out to the larger picture again—but this time with new insight into minute details. The focus narrows and broadens repeatedly as the fieldworker searches for breadth and depth of observation. Only by both penetrating the depth and skimming the surface can the ethnographer portray the cultural landscape in detail rich enough for others to comprehend and appreciate.

Appendix E

Interviewing

The interview is the ethnographer's and the ethnographic evaluator's most important data-gathering technique. Interviews explain and put into a larger context what ethnographers see and experience. They require verbal interaction, and language is the commodity of discourse. Words and expressions have different values in various cultures. People exchange these verbal commodities to communicate. The ethnographer quickly learns to savor the informant's every word for its cultural or subcultural connotations as well as its denotative meaning. General interview types include structured, semistructured, informal, and retrospective interviews. Although in practice these types overlap and blend, this discussion will artificially isolate interview types, strategies, and questions for purposes of description and discussion. Each interviewing approach has a role to play in soliciting information. However, the pros and cons of each interview type in data collection and analysis should be clear before employing these approaches in the field. (See Denzin, 1978; Goetz & LeCompte, 1984; Patton, 1990 for alternative approaches to classifying interviews. See also Bogdan & Biklen, 1982; Hammersley & Atkinson, 1983; Taylor & Bogdan, 1984; Werner & Schoepfle, 1987 for additional discussion about interviewing techniques.)

Formally structured and semistructured interviews are verbal approximations of a questionnaire with explicit research goals. These interviews generally serve comparative and representative purposes—comparing responses and putting them in the context of common group beliefs and themes. The fieldworker can use a structured interview at any time in the study. For example, a list of questions about the educational background of the teachers in a school under study is useful in securing comparative baseline data about the teachers' qualifications and experience. It can also be a nonthreatening icebreaker. At the beginning stages of a study, however, structured interviews tend to shape responses to conform to the researcher's conception of how the world works. These interviews are, therefore, most useful at the middle and end stages of a study to collect data about a specific question or hypothesis. A structured or semistructured interview is most valuable when the fieldworker comprehends the fundamentals of a community from the "insider's" perspective. At this point, questions are more likely to conform to the native perception of reality than to the researcher's.

Informal interviews are the most common in ethnographic work. They seem to be casual conversations, but where structured interviews have an explicit agenda, informal interviews have a specific but implicit research agenda. The researcher uses informal approaches to discover the categories of meaning in a culture. Informal interviews are useful throughout an ethnographic study to discover what people think and how one person's perceptions compare with another's. Such comparisons help identify shared values in the community—values that inform behavior. Informal interviews are also useful in establishing and maintaining a healthy rapport.

Informal interviews seem to be the easiest to conduct. They do not involve any specific types or order of questions, and can progress much as a conversation does, following the turns of the participant's or the questioner's interests. However, these interviews are probably the most difficult to conduct appropriately and productively. Issues of ethics and control emerge from every informal interview. How does the fieldworker establish and maintain a natural situation while attempting to learn about another person's life in a relatively systematic fashion? How can a completely open form, ripe for discovery, balance with an implicitly shaped structure designed to explore

specific issues and concerns? Finally, when is the time to take advantage of a golden opportunity, and when is it best not to pry further? Done well, informal interviewing feels like natural dialogue but answers the fieldworker's often unasked questions.

Informal interviews should be user friendly. In other words, they should be transparent to the participant after a short period of time. An informal interview is different from a conversation, but it typically merges with one, forming a mixture of conversation and embedded questions. The questions typically emerge from the conversation. In some cases, they are serendipitous and result from comments by the participant. In most cases, the ethnographer has a series of questions to ask the participant and will wait for the most appropriate time to ask them during the conversation (if possible).

Informal interviews offer the most natural situations or formats for data collection and analysis. Unfortunately, some degree of contamination is always present. However skillful the interviewer, certain questions will impose an artificiality. An experienced interviewer, however, learns how to begin with nonthreatening questions deeply embedded in conversation before posing highly personal and potentially threatening questions and to develop a healthy rapport before introducing sensitive topics. Sensitivity to timing and to the participant's tone is critical in interviewing—informal or otherwise. An ethnographer must learn to be attentive to a person's shifts in tone because these changes are important cues to attitudes and feelings. (See Fetterman, 1983 for a discussion of the ethical hazards ethnographers (and specifically ethnographic evaluators) face in the field.)

The chance to exploit a vulnerable individual to secure invaluable data may be tempting. In fact, it may be a rare opportunity to explore an individual's innermost secrets. However, beyond the obvious ethical considerations, the cost of exploiting an individual is too high, and the ethnographer must wait for another opportunity to come along or create one. One benefit of spending long periods of time at a site is that other, more propitious opportunities usually come along. Over sensitivity, however, can paralyze an ethnographer, placing unnecessary obstacles in the way of data collection and analysis.

A multitude of significant nonthreatening questions can elicit the information the fieldworker seeks and create many golden moments in which to ask questions naturally, as part of the general flow of conversation. Planning and executing properly placed questions is the essence of good ethnography, ensuring the quality of the data and maintaining the participant's rights to privacy.

Retrospective interviews can be structured, semistructured, or informal. The ethnographer and ethnographic evaluator uses retrospective interviews to reconstruct the past, asking informants to recall personal historical information. This type of interview does not elicit the most accurate data. People forget or filter past events. In some cases, retrospective interviews are the only way to gather information about the past. In situations where the ethnographer already has an accurate understanding of the historical facts, a retrospective interview provides useful information about the individual. The manner in which individuals shape the past highlights their values and reveals the configuration of their world view.

Ethnographers and ethnographic evaluators use interviews to help classify and organize an individual's perception of reality. All interviews share some generic kinds of questions. The most common types are survey or grand tour, detail or specific, open-ended or closed questions. Survey questions help identify significant topics to explore.

Specific and detailed questions explore these topics in more detail. They determine similarities and differences in the ways people see the world. Open-ended and closed-questions help the ethnographer and ethnographic evaluator discover and confirm the participant's experiences and perceptions. (See Fetterman, 1989 for a more detailed discussion of interviewing approaches and techniques.)

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